Actuarial Section



2016 COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2016

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Introduction

he funding methods used for the Defined Benefit retirement plans administered by INPRS are not governed by and do not conform to GASB Statement No. 67, so the actuaries prepare two actuarial valuations for each of the pension plans. One is an actuarial valuation used for financial reporting purposes that conforms to GASB Statement No. 67 as disclosed in the Financial Section. The second is an actuarial valuation used for funding purposes as disclosed in the Actuarial Section, which follows generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuarial methods and assumptions used to prepare the two actuarial valuations are nearly identical, with the primary difference being the method of valuation of the pension assets. For financial reporting purposes, the market value of the assets is used as of the fiscal year end. For funding purposes, a five (5) year smoothing of the gains or losses on the market value of assets is used for each year. Therefore, the amounts presented in the Actuarial Section may differ from the amounts presented for financial reporting purposes in the Financial Section.

There are two (2) actuaries providing the actuarial services for the eight (8) Defined Benefit retirement plans administered by INPRS as summarized below:

PricewaterhouseCoopers LLP

- Public Employees' Retirement Fund
- 1977 Police Officers' and Firefighters' Pension and Disability Fund
- Judges' Retirement System
- State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan
- Prosecuting Attorneys' Retirement Fund
- Legislators' Defined Benefit Plan

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- Teachers' Retirement Fund Pre–1996 Account
- Teachers' Retirement Fund 1996 Account

Accordingly, the INPRS FY2016 CAFR Actuarial Section includes an Actuary Certification Letter from each actuary for the actuarial valuations prepared as of June 30, 2016.

Actuaries' Certification Letters



November 2016

Board of Trustees Indiana Public Retirement System 1 North Capitol, Suite 001 Indianapolis, IN 46204

Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of June 30, 2016

Dear Board of Trustees:

Actuarial valuations are performed annually as required under statute for the Indiana Public Retirement System ("INPRS") defined benefit pension plans. The results of the June 30, 2016 actuarial valuations for all plans other than the Teachers' Retirement Fund are presented in individual valuation reports pursuant to the engagement letter between INPRS and PricewaterhouseCoopers LLP ("PwC"). These plans (the "Plans") include:

- Public Employees' Retirement Fund
- 1977 Police Officers' and Firefighters' Pension and Disability Fund
- Judges' Retirement System
- State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan
- Prosecuting Attorneys' Retirement Fund
- Legislators' Retirement System Defined Benefit Plan

The reports are intended to provide the Board of Trustees ("Board") and INPRS staff with information on the funded status of the Plans, development of the contribution rates, and certain financial statement disclosure information are intended for their sole use and benefit, and are not intended for reliance by other persons.

For accounting purposes, the actuarial assumptions and methods used in the June 30, 2016 valuations were selected and approved by the Board, and are in accordance with our understanding of GASB No.67.

For funding purposes, employer contribution rates and amounts, as applicable, are adopted annually for each Plan by the Board, per Indiana statutes. The contributions are actuarially determined based on the funding policy, actuarial assumptions, and actuarial methods selected and approved by the Board. Contributions determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. Therefore, contribution rates and amounts determined by the June 30, 2016 actuarial valuation and adopted by the Board will become effective on either July 1, 2017 or January 1, 2018. If new legislation is enacted between the valuation date and the date the contributions become effective, the Board may adjust the recommended contributions before adopting them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing Objectives and Funding Policy

In setting contribution levels, the Board's principal objectives have been:

- To set contributions such that the unfunded actuarial accrued liability ("UAAL") of plans that are open to new entrants will be amortized over a period not greater than 20 years for any UAAL arising during the year ending June 30, 2016, and 30 years for any UAAL that arose prior to the year ending June 30, 2016. For plans that are closed to new entrants, the UAAL will be amortized over a period not greater
- To set contributions such that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that employer contributions be equal to the sum of the employer normal cost (which pays the current year cost of benefits accruing) and an amortization of the UAAL in equal installments.

Progress Toward Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements and/or adverse experience it should increase over time, until it reaches 100% if contributions equal or exceed the actuarially determined amount. The combined funded ratio for all Plans (excluding the Teachers' Retirement Fund) increased by 0.3% from the preceding year to 84.6%, primarily due to contributions exceeding the actuarially determined amounts, offset by investment returns less than the 6.75% assumed, and other adverse member demographic experience.

Actuaries' Certification Letters, continued



Benefit Provisions

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2016, as set forth in Indiana statutes. There were no material changes in benefit provisions since the 2015 valuations.

Assets and Member Data

The valuations were based on asset values of the trust funds as of June 30, 2016 and member census data as of June 30, 2015, adjusted for certain activity during fiscal year 2016. All asset information and member data were provided by INPRS. While certain checks for reasonableness were performed, the data was used unaudited. The accuracy of the results presented in the reports is dependent upon the accuracy and completeness of the underlying asset and census information.

Actuarial Assumptions and Methods

The actuarial assumptions used in the June 30, 2016 valuations were the same assumptions used in the 2015 valuations. The assumptions were adopted by the Board pursuant to an experience study completed in April 2015, which reflected the experience period from July 1, 2010 through June 30, 2014, as well as data from earlier studies. The June 30, 2016 valuations incorporate member census data as of June 30, 2015, adjusted for certain activity during fiscal year 2016. Standard actuarial techniques were used to roll forward valuation results from June 30, 2015 to June 30, 2016.

The actuarial assumptions and methods are summarized in the Actuarial Assumptions and Methods section of each valuation report. We believe the actuarial assumptions and methods are reasonable for the purposes of the valuation reports and comply with the parameters set forth in Statements No. 67 and No. 68 of the Governmental Accounting Standards Board ("GASB"). Different assumptions and methods may be reasonable for other purposes. As such, the results presented in the valuation reports should only be relied upon for the intended purposes stated therein.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by INPRS (other than the Teachers' Retirement Fund) as of June 30, 2016, based on the underlying census data, asset information and selected assumptions and methods. This information is presented in several schedules and exhibits in this report, including the following:

Financial Section:

- Note 1 Tables of Plan Membership (Included in the Historical Summary)
- Note 8 Net Pension Liability and Actuarial Information Defined Benefit Plans (Included in the Accounting Section)
- Schedule of Changes in Net Pension Liability and Plan Fiduciary Net Position
- Schedule of Contributions (Actuarially Determined Contribution)
- · Schedule of Notes to Required Supplementary Information

Actuarial Section:

- Summary of INPRS Funded Status (Included in the Historical Summary)
- Historical Summary of Actuarial Valuation Results by Retirement Plan (Schedule of Funding Progress Included in the Historical Summary)
- · Summary of Actuarial Assumptions, Methods and Plan Provisions
- Analysis of Financial Experience (Included in the Unfunded Actuarial Accrued Liability Reconciliation)
- Solvency Test (Included in the Historical Summary)
- Schedule of Active Member Valuation Data
- · Schedule of Retirants and Beneficiaries

Statistical Section:

- Membership Data Summary (Included in the Historical Summary)
- Ratio of Active Members to Annuitants (Census Counts Included in the Historical Summary)
- · Schedule of Benefit Recipients by Type of Benefit Option
- Schedule of Average Benefit Payments

Subject to reliance on the data provided, all estimates are based on information available as of a point in time and are subject to ongoing unforeseen and random events. As such, any reported results must be viewed as having a likely range of variability from the estimate, both up and down. Differences between our estimates and actual results depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Although estimated amounts have not been rounded, no inference should be made regarding the precision of such results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Actuaries' Certification Letters, continued



To the best of our knowledge our actuarial reports are complete and accurate and have been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with our understanding of the requirements of Indiana state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between the PwC practitioners involved in this engagement and INPRS that may impair our objectivity.

Respectfully submitted,

Ms. Cindy Fraterrigo

Member, American Academy of Actuaries Fellow of the Society of Actuaries Enrolled Actuary (No. 14-06229)

Cindy Draturiza

Branden J. Roberton Mr. Brandon Robertson

Member, American Academy of Actuaries Associate of the Society of Actuaries Enrolled Actuary (No. 14-07568)

Mr. Antonio DeSario

Member, American Academy of Actuaries Fellow of the Society of Actuaries Enrolled Actuary (No. 14-08239)

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The content of this document is limited to the matters specifically addressed herein and does not address any other potential tax consequences, or the potential application of tax penalties, to any matter other than as set forth herein. Our conclusions are not binding upon any taxing authority or the courts and there is no assurance that any relevant taxing authority will not successfully assert a contrary position. In addition, no exceptions (including the reasonable cause exception) are available for any federal or state penalties imposed if any portion of a transaction is determined to lack economic substance or fails to satisfy any similar rule of law, and our advice will not protect you from any such penalties. This document supersedes all prior written or oral advice with respect to the issues addressed in this document and all such prior communications should not be relied upon by any person for any purpose.

Actuaries' Certification Letters, continued

nyhart

November 7, 2016

The Board of Trustees Indiana Public Retirement System Indianapolis, IN

Dear Board Members:

Actuarial valuations are prepared annually for the Indiana State Teachers' Retirement Funds. Submitted in this report are the results of the June 30, 2016 actuarial valuations.

Census Data and Asset Information

The member census data and the asset information for the valuations were furnished by the Chief Financial Officer and Staff. Their efforts and cooperation in furnishing these materials are acknowledged with appreciation. We did not audit the information provided, but we did review it thoroughly for reasonableness and compared it with the prior year's submission for consistency.

Assumptions and Methods

The actuarial assumptions used in the June 30, 2016 valuations are based on plan experience from July 1, 2011 to June 30, 2014. The Board adopted changes to the Actuarial Value of Assets smoothing period and to the amortization period for the Calculated Contribution Rate effective with the June 30, 2016 valuation. Assumptions are summarized in the Assumptions and Methods section of the June 30, 2016 valuation reports. These assumptions and methods have been used to develop the Actuarially Determined Contribution and are consistent with the accounting requirements detailed in GASB Statements No. 67 and No. 68.

Benefit obligations in the June 30, 2016 valuations are determined using June 30, 2015 census data and rolled-forward to the June 30, 2016 measurement date at the valuation interest rate, using actual distributions and ASA account returns during that period. We are not aware of any material events that would require additional adjustments to the benefit obligations for changes to the population not anticipated in the demographic assumptions used in the valuation.

Funding Objectives

The Indiana State Teachers' Retirement Fund Pre-1996 Account is funded on a pay-as-you-go basis from the State of Indiana.

The funding objective of the Indiana State Teachers' Retirement Fund 1996 Account is to establish and receive contributions that, when invested at the assumed rate of return, will ultimately accumulate assets over each member's working lifetime that will be sufficient to pay expected retirement allowances. As such, an employer contribution rate is calculated each year. That rate is then considered in conjunction with the goal of maintaining a relatively stable contribution over time.

Fund Structure

The Indiana State Teachers' Retirement Fund (TRF) is one fund comprised of a two-account structure in compliance with Indiana Code Section 5-10.4-2-2.

The Pre-1996 Account consists of members who were hired prior to July 1, 1995, and who have maintained continuous employment with the same school corporation or covered institution since that date.

Actuaries' Certification Letters, continued



Characteristics of the Pre-1996 Account

- 1. Active membership in the Pre-1996 Account continues to decline as members quit, become disabled, die, or retire.
- 2. The Defined Benefits from the Pre-1996 Account are funded by State appropriations (including contributions of some revenue from the State Lottery). At the time of retirement, Annuity Savings Account (ASA) benefits payable from the Pre-1996 Account are funded by the annuitization of Pre-1996 Account member contributions.

The 1996 Account consists of members who were:

- 1. hired on or after July 1, 1995; or
- 2. hired before July 1, 1995, and prior to June 30, 2005:
 - a. were either hired by another school corporation or institution covered by TRF, or
 - b. were re-hired by a covered prior employer.

Characteristics of the 1996 Account

- 1. As members depart from active service in the Pre-1996 Account, their replacements will become members of the 1996 Account. If the 1996 Account were a stand-alone plan, this pattern of departures and hirings would produce a fairly constant population size.
- 2. Defined Benefits payable from the 1996 Account are funded by contributions from local school corporations or other institutions that employ covered members. At the time of retirement, ASA benefits payable from the 1996 Account are funded by the annuitization of 1996 Account member contributions.

Funding Arrangements

Prior to the legislation that established the two-account structure of TRF, the Defined Benefits of the Indiana State Teachers' Retirement Fund were funded with a pay-as-you-go method. Under this arrangement, amounts were appropriated to meet the current year's pension payment requirements. Defined Benefits payable from the Pre-1996 Account continue to be funded on this basis. In 1995, the Pension Stabilization Fund was set up for the Pre-1996 Account. Since then, some pre-funding progress has been made via State appropriations to this account.

Defined Benefits payable from the 1996 Account are funded through employer percent-of-pay contributions. The Board of the Indiana Public Retirement System sets this contribution rate after reviewing the most recent actuarial valuation report. The contribution rate of 7.50% for fiscal year 2017 was set by the Board in fiscal year 2016. The contribution rate of 7.50% for fiscal year 2018 was set by the Board in fiscal year 2017.

Progress Towards Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%.

The funded ratio of the Pre-1996 Account (pay-as-you-go) decreased to 29.7% from 30.4% for the preceding year. Based on the actuarial assumptions, it is anticipated that the Pre-1996 Account will attain 100% funded status on 6/30/2039.

The funded ratio of the 1996 Account decreased to 91.8% from 92.5% for the preceding year. Based on the actuarial assumptions, it is anticipated that the 1996 Account will attain 100% funded status on 6/30/2035.

Actuaries' Certification Letters, continued



Certification

We have included several schedules and exhibits in this report, including the following:

Financial Section

- Note 1 Tables of Plan Membership
- Note 8 Net Pension Liability and Actuarial Information Defined Benefit Plans
- Schedule of Changes in Net Pension Liability and Net Pension Liability
- Schedule of Contributions (Actuarially Determined Contribution)
- Schedule of Notes to Required Supplementary Information

Actuarial Section

- Summary of INPRS Funded Status
- Historical Summary of Actuarial Valuation Results by Retirement Plan (Schedule of Funding Progress)
- Summary of Actuarial Assumptions, Methods and Plan Provisions
- Analysis of Financial Experience (Unfunded Actuarial Accrued Liability Reconciliation)
- Solvency Test
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries

Statistical Section

- Membership Data Summary
- Ratio of Active Members to Annuitants
- Schedule of Benefit Recipients by Type of Benefit Option
- Schedule of Average Benefit Payments

To the best of our knowledge, this report presents a fair position of the funded status of the plan in accordance with the Actuarial Standards of Practice as described by the American Academy of Actuaries. In addition, information has been prepared in accordance with applicable government standards of financial reporting for defined benefit pension plans.

The actuarial valuation is prepared using information which has been reconciled and reviewed for reasonableness. We are not aware of any material inadequacy in employee census or asset values. The census information and the asset information have been provided to us by the Chief Financial Officer and Staff. We have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based.

In our opinion, the actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

Respectfully submitted,

Michael Zurek, EA, MAAA

Danielle Winegardner, ASA, Tayt
EA, MAAA MAA

Tayt V. Odom, FSA, EA,

MAAA

Summary of Funded Status

(dollars in millions)	Actuar	ial Valuation	as of June 3	0, 2016	Actuarial Valuation as of June 30, 2015			
Pre-Funded Defined Benefit Retirement Plans	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability ¹	Actuarial Funded Status	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability ¹	Actuarial Funded Status
Public Employees' Retirement Fund	\$ 18,408.9	\$ 14,553.0	\$ 3,855.9	79.1 %	\$ 17,980.6	\$ 14,131.9	\$ 3,848.7	78.6 %
Teachers' Retirement Fund 1996 Account	6,391.8	5,865.8	526.0	91.8	5,905.7	5,461.2	444.5	92.5
1977 Police Officers' and Firefighters' Pension and Disability Fund	5,039.8	5,255.2	(215.4)	104.3	4,680.7	4,939.3	(258.6)	105.5
Judges' Retirement System	501.1	469.4	31.7	93.7	468.9	447.5	21.4	95.4
State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan	138.9	118.5	20.4	85.3	132.8	112.8	20.0	84.9
Prosecuting Attorneys' Retirement Fund	85.0	56.4	28.6	66.4	77.9	54.9	23.0	70.4
Legislators' Defined Benefit Plan	4.0	3.2	0.8	80.7	4.3	3.3	1.0	77.1
Total Pre-Funded Defined Benefit Retirement Plans	\$ 30,569.5	\$ 26,321.5	\$ 4,248.0	86.1 %	\$ 29,250.9	\$ 25,150.9	\$ 4,100.0	86.0 %
Pay-As-You-Go Defined Benefit Retirement Plan								
Teachers' Retirement Fund Pre-1996 Account	16,840.2	5,009.0	11,831.2	29.7	17,017.7	5,171.6	11,846.1	30.4
Total Defined Benefit Retirement Plans	\$ 47,409.7	\$ 31,330.5	\$ 16,079.2	66.1 %	\$ 46,268.6	\$ 30,322.5	\$ 15,946.1	65.5 %

¹The Unfunded Actuarial Accrued Liability is calculated using the Actuarial Value of Assets (AVA), which is different from the Net Pension Liability in the Financial Section which uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).

Analysis of Financial Experience

(dollars in thousands)		(Gain) / Loss						
Defined Benefit Retirement Plans	June 30, 2015 UAAL ¹	Actuarial Value of Assets Experience	Actuarial Accrued Liabilities Experience ²	Amortization of Existing Bases	Actuarial Assumption & Methodology Changes ³	Plan Provision Changes	June 30, 2016 UAAL ¹	
Public Employees' Retirement Fund	\$ 3,848,685	\$ 91,335	\$ (4,870)	\$ (59,984)	\$ (19,279)	\$ -	\$ 3,855,887	
Teachers Retirement Fund Pre-1996 Account	11,846,107	75,846	(5,794)	(73,114)	(11,834)	-	11,831,211	
Teachers Retirement Fund 1996 Account	444,519	60,156	29,892	(15,531)	6,985	-	526,021	
1977 Police Officers' and Firefighters' Pension and Disability Fund	(258,636)	9,332	41,724	2,864	(10,703)	-	(215,419)	
Judges' Retirement System	21,430	5,011	7,182	(799)	(1,076)	-	31,748	
State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan	20,031	623	469	(363)	(311)	-	20,449	
Prosecuting Attorneys' Retirement Fund	23,012	2,027	4,058	(333)	(203)	-	28,561	
Legislators' Defined Benefit Plan	991	84	(232)	(38)	(30)	-	775	
Total INPRS	\$15,946,139	\$ 244,414	\$ 72,429	\$ (147,298)	\$ (36,451)	\$ -	\$16,079,233	

¹UAAL: Unfunded Actuarial Accrued Liabilities
²Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census assumptions.
³The asset smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Ten-Year Schedule of Participating Employers As of June 30

	Total ¹	PERF	TRF Pre-1996 ²	TRF 1996 ²	TOTAL TRF ²	1977	JRS	EG&C	PARF	LEDB
2016	1,224	1,177	337	362	N/A	165	1	1	1	1
2015	1,212	1,167	339	360	N/A	165	1	1	1	1
2014	1,175	1,126	340	363	N/A	162	1	1	1	1
2013 ³	1,171	1,121	N/A	N/A	365	161	1	1	1	1
20123	1,170	1,122	N/A	N/A	364	162	1	1	1	1
2011	1,182	1,132	N/A	N/A	369	166	1	1	1	1
2010	1,230	1,180	N/A	N/A	367	164	1	1	1	1
2009	1,220	1,179	N/A	N/A	360	160	1	1	1	1
2008	1,207	1,167	N/A	N/A	361	158	1	1	1	1
2007 4	1,663	1,138	N/A	N/A	360	161	1	1	1	1

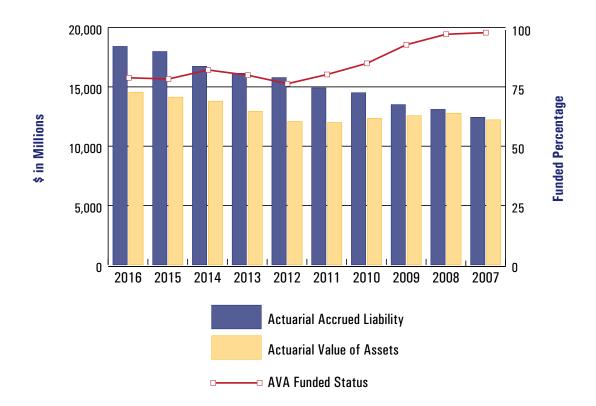
¹Sum of individual employers by retirement plan does not equal total employers, since one (1) employer may participate in multiple retirement plans. ²Prior to June 30, 2014 participating employers for TRF were not split between the TRF Pre-1996 Account and the TRF 1996 Account. ³The Total was adjusted to treat the State and it's component units as one employer. ⁴Total is the sum of each of the plans, so employers are duplicated if they participate in more than one plan.

Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	A	actuarial Accrued Dility (AAL)	٧	ctuarial alue of ets (AVA)	Li	ifunded ability¹ L – AVA)	AVA Funded Status (AVA/AAL)	Covered Payroll ²		Unfunded Liability ¹ as a percentage of Covered Payroll	
2016	\$	18,408.9	\$	14,553.0	\$	3,855.9	79.1 %	\$	4,853.2		79.5 %
2015		17,980.6		14,131.9		3,848.7	78.6		4,804.1		80.1
2014		16,732.2		13,791.3		2,940.9	82.4		4,896.6		60.1
2013		16,145.7		12,947.3		3,198.4	80.2		4,700.0		68.1
2012		15,784.2		12,088.2		3,696.0	76.6		4,550.0		81.2
2011		14,913.1		12,000.6		2,912.5	80.5		4,500.0		64.7
2010		14,506.1		12,357.2		2,148.9	85.2		4,800.0		44.8
2009		13,506.2		12,569.3		936.9	93.1		4,850.0		19.3
2008		13,103.2		12,780.1		323.1	97.5		4,550.0		7.1
2007		12,439.8		12,220.9		218.9	98.2		4,325.0		5.1

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section that uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Public Employees' Retirement Fund were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS Funding Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$19.3 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Inflation: 2.25 percent per year

Cost of Living Increases: 1.00 percent per year in retirement

Based on 2010-2014 experience. Illustrative rates shown below: Future Salary Increases:

Age	Inflation	Productivity, Merit, and Promotion	Total Individual Salary Growth
<31	2.25%	2.00%	4.25%
31-45	2.25	1.50	3.75
46-55	2.25	1.00	3.25
56-60	2.25	0.50	2.75
>= 61	2.25	0.25	2.50

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled):

RP-2014 Total Data Set Mortality Tables, with Social Security generational improvements from 2006 based on the Social Security Administration's 2014 Trustee Report.

Retirement:

Years of Service											
Age	10-14	15-25	26	27	28	29	30+				
50-54	- %	4 %	4 %	4 %	4 %	4 %	4 %				
55	-	5	5	5	5	5	14				
56	-	5	5	5	5	14	10				
57	-	5	5	5	14	10	10				
58	-	5	5	14	10	10	10				
59	-	5	14	10	10	10	10				
60	-	12	12	12	12	12	12				
61	-	16	16	16	16	16	16				
62	-	22	22	22	22	22	22				
63	-	19	19	19	19	19	19				
64	-	24	24	24	24	24	24				
65-74	30	30	30	30	30	30	30				
75+	100	100	100	100	100	100	100				

Benefit Commencement Timing:

Active Members

If eligible for a reduced early retirement benefit upon termination from employment, 33% commence immediately and 67% defer to earliest unreduced retirement age.

If eligible for an unreduced retirement benefit upon termination from employment, 100% commence immediately.

Terminated Vested Members

100% defer to earliest unreduced retirement age. If currently eligible for an unreduced retirement benefit, 100% commence immediately.

Termination:

Ultimate tables illustrative rates shown below:

Earnings < \$20,000

	State		Polit	Political Subdivision				
Age	Male	Female	Age	Male	Female			
20-24	32 %	34 %	20-24	31 %	36 %			
25-29	32	33	25-29	31	34			
30-34	32	30	30-34	26	25			
35-39	29	30	35-39	22	18			
40-44	29	24	40-44	21	15			
45-49	26	24	45-49	18	12			
50-54	25	22	50-54	14	11			
55+	22	20	55+	14	11			

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

State (Male)						Years	s of Service	e				
Earnings >= \$20,000	Age	0	1	2	3	4	5	6	7	8	9	10+
	20-24	23 %	23 %	23 %	20 %	20 %	17 %	17 %	12 %	12 %	7 %	7 %
	25-29	23	23	23	19	17	17	17	12	12	7	7
	30-34	22	22	19	18	16	13	13	12	7	7	7
	35-39	17	17	17	17	16	10	10	9	7	6	6
	40-44	17	17	14	12	12	10	9	9	7	5	5
	45-49	14	14	14	10	10	10	9	7	4	4	4
	50-54	14	14	9	9	9	9	9	7	4	4	4
	55+	13	13	7	7	7	7	7	7	4	4	4
State (Female)	Years of Service											
Earnings >= \$20,000	Age	0	1	2	3	4	5	6	7	8	9	10+
•	20-24	23 %	23 %	23 %	23 %	17 %	17 %	13 %	12 %	11 %	8 %	8 %
	25-29	23	23	22	21	17	17	13	12	11	8	8
	30-34	21	21	21	17	15	14	12	12	11	8	8
	35-39	19	19	16	16	12	12	12	12	9	8	7
	40-44	18	18	16	13	12	12	9	9	8	8	6
	45-49	16	16	16	13	10	10	9	9	8	8	6
	50-54	16	16	15	12	10	9	9	9	6	6	6
	55+	16	16	11	11	10	9	9	9	6	6	6
Political Subdivisions (Male)						Years	s of Servic	ce				
Earnings >= \$20,000	Age	0	1	2	3	4	5	6	7	8	9	10+
	20-24	18 %	18 %	18 %	18 %	14 %	12 %	11 %	11 %	7 %	7 %	5 %
	25-29	18	18	18	16	14	12	11	11	7	7	5
	30-34	16	16	16	15	13	11	11	11	7	7	5
	35-39	15	15	12	12	12	10	9	9	7	7	5
	40-44	13	13	11	11	10	10	9	9	7	7	4
	45-49	11	11	11	11	9	7	7	7	7	7	4
	50-54	11	11	9	9	9	7	7	6	6	4	4
	55-59	11	11	7	7	7	7	7	5	5	4	4
	60+	8	8	7	7	7	7	7	5	5	4	4
Political Subdivisions (Female)					Years	s of Servic	е				
Earnings >= \$20,000	Age	0	1	2	3	4	5	6	7	8	9	10+
	20-24	22 %	22 %	19 %	16 %	14 %	14 %	11 %	11 %	9 %	7 %	7 %
	25-29	21	21	18	16	14	14	11	11	9	7	7
	30-34	16	16	16	14	14	14	11	11	9	7	7
	35-39	14	14	14	12	12	12	9	9	9	7	6
	40-44	13	13	12	11	10	8	8	8	8	7	4
	45-49	12	12	12	10	8	8	8	7	6	6	4
	50-54	11	11	10	8	8	6	6	6	6	5	4
	55+	11	11	8	8	8	6	6	6	6	4	4

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

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Age	Male	Female
20	0.0067 %	0.0050 %
30	0.0208	0.0158
40	0.0646	0.0496
50	0.2005	0.1556
60	0.5815	0.3751
70	0.1000	0.1000
80	0.0000	0.0000

Spouse/Beneficiary:

75 percent of male members and 60 percent of female members are assumed to be married and or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

ASA Withdrawal:

Prior to April 1, 2017:

- 40% of active members who decrement while vested are assumed to withdraw their ASA balance immediately upon decrement.
- 40% of vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.
- 100% of active members who decrement prior to vesting are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of non-vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.

Beginning April 1, 2017:

- 100% of active members are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of inactive members are assumed to withdraw their ASA balance immediately.

ASA Annuitization:

Prior to April 1, 2017:

- 60% of active members who decrement while vested are assumed to annuitize their ASA balance at their assumed retirement age.
- 60% of vested inactive members are assumed to annuitize their ASA balance at their assumed retirement age.
- The conversion rate is 4.5%.

Beginning April 1, 2017, assumes INPRS will outsource annuities to a third party for all ASA annuitizations.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

> The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

> This method produces a cost of future benefit accruals that is a level percent of pay over time, which is more desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method:

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method:

Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	UAAL		
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	3,848,685	
UAAL (Gain) / Loss			
Actuarial Value of Assets Experience		91,335	
Actuarial Accrued Liabilities Experience ¹		(4,870)	
Amortization of Existing Bases		(59,984)	
Actuarial Assumption & Methodology Changes ²		(19,279)	
Plan Provision Changes			
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	3,855,887	

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census

Solvency Test

(dollars in thousands)

		Actuarial Accr	ued Liabilities		_	Portion of Actuarial Accrued Liabilities Covered by Assets					
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities		
2016	\$ 2,656,892	\$ 7,595,088	\$ 8,156,966	\$ 18,408,946	\$ 14,553,059	100.0 %	100.0 %	52.7%	79.1 %		
2015	2,717,173	6,981,308	8,282,087	17,980,568	14,131,884	100.0	100.0	53.5	78.6		
2014	2,851,501	6,250,902	7,629,820	16,732,223	13,791,261	100.0	100.0	61.5	82.4		
2013	2,796,103	6,367,819	6,981,759	16,145,681	12,947,283	100.0	100.0	54.2	80.2		
2012	2,749,449	5,895,779	7,139,012	15,784,240	12,088,225	100.0	100.0	48.2	76.6		
2011	2,805,023	5,370,786	6,737,338	14,913,147	12,000,586	100.0	100.0	56.8	80.5		
2010	2,780,570	4,931,592	6,793,890	14,506,052	12,357,199	100.0	100.0	68.4	85.2		
2009	2,669,318	4,611,257	6,225,705	13,506,280	12,569,336	100.0	100.0	85.0	93.1		
2008	2,694,331	4,227,366	6,181,524	13,103,221	12,780,116	100.0	100.0	94.8	97.5		
2007	2,707,176	4,007,389	5,725,233	12,439,798	12,220,934	100.0	100.0	96.2	98.2		

assumptions.

²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

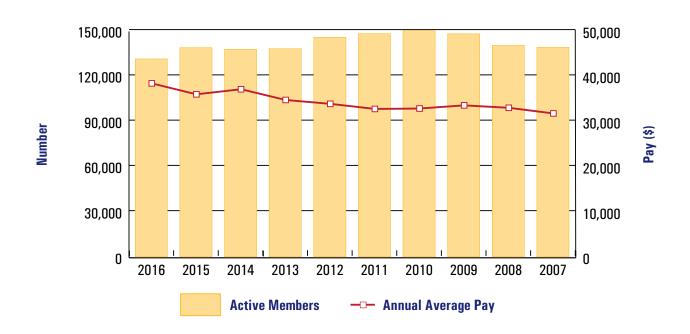
Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Anı	nual Payroll ¹	Annu	al Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2016 ²	131,178	\$	5,014,012	\$	38,223	6.8 %
2015 ²	138,660		4,964,813		35,806	(3.0)
2014 ²	137,567		5,080,092		36,928	6.9
2013	137,937		4,766,910		34,559	2.5
2012	145,519		4,904,052		33,700	3.5
2011	147,933		4,818,774		32,574	(0.3)
2010	149,877		4,896,013		32,667	(2.1)
2009	147,792		4,931,423		33,367	1.7
2008	140,146		4,600,354		32,825	3.9
2007	138,863		4,385,676		31,583	2.7

¹Figures shown are the anticipated pay for the one-year period following the valuation date.

Total Number of Active Members Per Year and Annual Average Pay



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

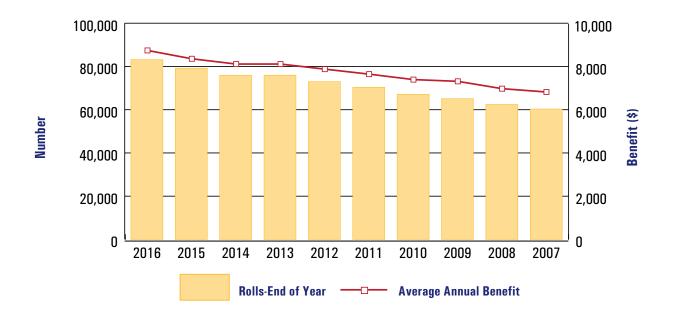
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added to Rolls		Removed	Removed from Rolls		nd of Year	Percent			Percent
	Number	Annual Benefits	Number	Annual Benefits	Number	Total Annual Benefits ^{1,2}	Increase / (Decrease) In Total Annual Benefits	A	verage Annual enefit²	Increase / (Decrease) in Average Annual Benefit
2016 ³	6,478	\$ 78,487	2,488	\$ 15,597	83,188	\$729,366	9.9 %	\$	8,768	4.6 %
2015 ³	5,489	60,538	2,241	14,107	79,198	663,767	7.4		8,381	3.0
2014 ³	-	-	-	-	75,950	617,977	-		8,137	-
2013	5,231	55,523	2,273	13,898	75,950	617,977	7.2		8,137	3.0
2012	4,751	49,766	2,139	12,540	72,992	576,678	6.8		7,901	3.0
2011	5,402	56,185	2,188	11,698	70,380	539,747	8.3		7,669	3.4
2010	4,827	39,214	2,760	19,022	67,166	498,199	4.3		7,417	1.1
2009	6,047	55,726	3,372	19,103	65,099	477,553	9.3		7,336	4.9
2008	5,376	43,915	3,284	18,022	62,424	436,749	5.8		6,996	2.3
2007	4,633	42,653	2,584	15,229	60,332	412,745	9.3		6,841	5.6

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases.
²Annual benefits includes members selecting an annuity for their ASA..

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit



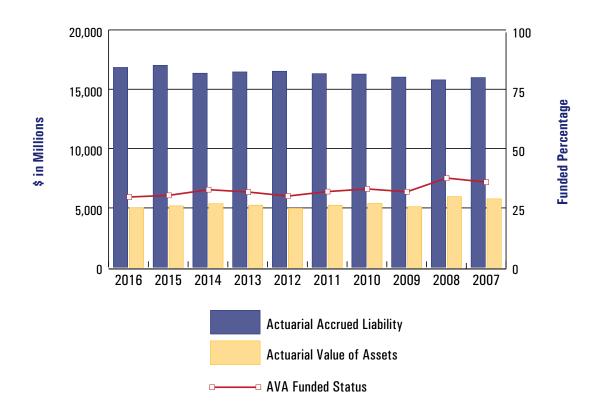
³The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	A	Actuarial Accrued Dility (AAL)	Va	etuarial alue of ets (AVA)	L	nfunded iability¹ AL – AVA)	AVA Funded Status Covered (AVA/AAL) Payroll ²			Unfunded Liability ¹ as a percentage of Covered Payroll	
2016	\$	16,840.2	\$	5,009.0	\$	11,831.2	29.7 %	\$	989.1	1,196.2 %	
2015		17,017.7		5,171.6		11,846.1	30.4		1,074.8	1,102.2	
2014		16,355.2		5,358.3		10,996.9	32.8		1,262.8	870.8	
2013 ³		16,462.4		5,235.1		11,227.3	31.8		1,383.4	811.6	
2012		16,522.0		4,978.1		11,543.9	30.1		1,637.1	705.2	
2011		16,318.4		5,227.4		11,091.0	32.0		1,762.8	629.2	
2010		16,282.1		5,382.4		10,899.7	33.1		1,865.1	584.4	
2009		16,027.1		5,109.1		10,918.0	31.9		2,030.5	537.7	
2008		15,792.3		5,954.0		9,838.3	37.7		2,295.8	428.5	
2007		15,988.3		5,763.5		10,224.8	36.0		2,376.4	430.3	

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section that uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.

³The State of Indiana contributed additional monies of \$206,796 thousand.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Teachers' Retirement Fund 1996 Account were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2011 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 5-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a retroactive basis, beginning with the June 30, 2016 actuarial valuation, such that bases established prior to June 30, 2016 will be eliminated and the entire Unfunded Actuarial Accrued Liability will be amortized over 5 years. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$11.8 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Inflation: 2.25 percent per year

Cost of Living Increases: 1.00 percent per year in retirement

Future Salary Increases: Based on 2011-2014 experience. Illustrative rates shown below:

Years of Service	Inflation	Merit and Seniority	Total Individual Salary Growth
1	2.25 %	10.25 %	12.50 %
5	2.25	2.75	5.00
10	2.25	2.75	5.00
15	2.25	1.50	3.75
20	2.25	0.25	2.50
25	2.25	0.25	2.50
30	2.25	0.25	2.50
35	2.25	0.25	2.50
40	2.25	0.25	2.50

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2011-2014 Experience

Mortality (Healthy and Disabled):

RP-2014 White Collar Mortality Table, with Social Security generational improvements from 2006 based on the Social Security Administration's 2014 Trustee Report.

Retirement:

Regular Retirement		Rule of 8	5 Retirement	Early Retirement		
Age	Probability	Age	Age Probability		Probability	
				50-53	2.0 %	
				54	5.0	
		55	15.0 %	55	5.0	
		56	15.0	56	5.0	
		57	15.0	57	6.5	
		58	15.0	58	8.0	
		59	20.0	59	12.0	
60	20.0 %	60	20.0			
61	25.0	61	25.0			
62	30.0	62	30.0			
63	35.0	63	35.0			
64	40.0	64	40.0			
65-69	45.0	65-69	45.0			
70+	100.0	70+	100.0			

Termination:

	Service Based		Age Based ¹			
Years of Service	Male	Female	Attained Age	Male	Female	
0	35.0 %	35.0 %	30	2.25 %	3.0 %	
1	14.0	14.0	35	2.25	3.0	
2	11.0	11.0	40	2.25	2.0	
3	9.0	9.0	45	2.25	2.0	
4	8.0	8.0	50	2.25	2.0	
5	7.0	7.0	55	2.25	2.0	
6	6.0	6.0	60	2.25	2.0	
7	5.0	5.5				
8	4.5	5.0				
9	4.5	4.5				

¹Age-based rates apply only if 10 or more years of service.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

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Age	Male	Female
25	0.01 %	0.01 %
30	0.01	0.01
35	0.01	0.01
40	0.01	0.01
45	0.02	0.02
50	0.05	0.05
55	0.09	0.09
60	0.10	0.10

Spouse/Beneficiary:

100 percent of members are assumed to be married for purposes of valuing death-in-service benefits. Male spouses are assumed to be three (3) years older than female spouses.

ASA Withdrawal:

Prior to April 1, 2017:

- 50% of active members who decrement while vested are assumed to withdraw their ASA balance immediately upon decrement.
- 50% of vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.
- 100% of active members who decrement prior to vesting are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of non-vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.

Beginning April 1, 2017:

- 100% of active members are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of inactive members are assumed to withdraw their ASA balance immediately.

ASA Annuitization:

Prior to April 1, 2017:

- 50% of active members who decrement while vested are assumed to annuitize their ASA balance at their assumed retirement age.
- 50% of vested inactive members are assumed to annuitize their ASA balance at their assumed retirement age.
- The conversion rate is 4.5%.

Beginning April 1, 2017, assumes INPRS will outsource annuities to a third party for all ASA annuitizations.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

> The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

> This method produces a cost of future benefit accruals that is a level percent of pay over time, which is more desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method:

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a five-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new five-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method:

Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	ds) UAA		
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	11,846,107	
UAAL (Gain) / Loss			
Actuarial Value of Assets Experience		75,846	
Actuarial Accrued Liabilities Experience ¹		(5,794)	
Amortization of Existing Bases		(73,114)	
Actuarial Assumption & Methodology Changes ²		(11,834)	
Plan Provision Changes			
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	11,831,211	

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census

Solvency Test

(dollars in thousands)

Actuarial Accrued Liabilities							Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Retirees an Contributions Beneficiarie					Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2016	\$ 1,161,803	\$ 11,461,481	\$ 4,216,916	\$ 16,840,200	\$	5,008,989	100.0 %	33.6 %	- %	29.7 %	
2015	1,303,468	10,606,053	5,108,225	17,017,746		5,171,639	100.0	36.5	-	30.4	
2014	1,525,192	9,876,539	4,953,485	16,355,216		5,358,351	100.0	38.8	-	32.8	
2013	1,636,978	10,254,953	4,570,448	16,462,379		5,235,104	100.0	35.1	-	31.8	
2012	1,782,353	9,451,792	5,287,870	16,522,015		4,978,107	100.0	33.8	-	30.1	
2011	2,015,580	8,776,916	5,525,908	16,318,404		5,227,402	100.0	36.6	-	32.0	
2010	2,353,715	8,153,240	5,775,111	16,282,066		5,382,410	100.0	37.1	-	33.1	
2009	2,389,886	7,891,346	5,745,861	16,027,093		5,109,086	100.0	34.5	-	31.9	
2008	2,613,138	7,244,422	5,934,745	15,792,305		5,953,991	100.0	46.1	-	37.7	
2007	3,016,052	7,063,889	5,908,318	15,988,259		5,763,508	100.0	38.9	-	36.1	

assumptions.

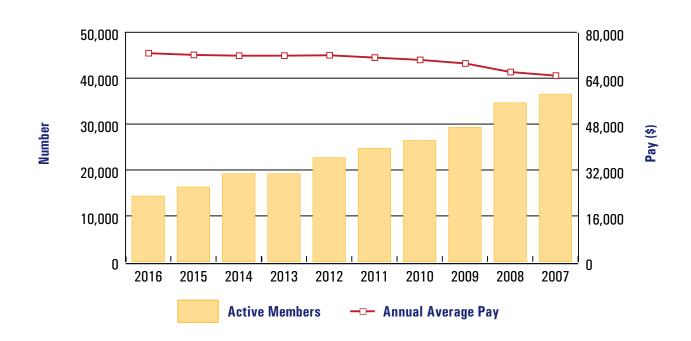
²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Anı	nual Payroll ¹	Annu	ial Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2016 ²	14,327	\$	1,044,096	\$	72,876	0.8 %
2015 ²	16,310		1,178,846		72,277	0.4
2014 ²	19,210		1,383,242		72,006	(0.0)
2013	19,210		1,383,428		72,016	(0.2)
2012	22,688		1,637,066		72,156	1.1
2011	24,710		1,762,750		71,338	1.1
2010	26,439		1,865,102		70,544	1.8
2009	29,297		2,030,484		69,307	4.5
2008	34,628		2,295,816		66,299	1.9
2007	36,526		2,376,390		65,060	7.6

Total Number of Active Members Per Year and Annual Average Pay



¹Figures shown are the anticipated pay for the one-year period following the valuation date.

²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

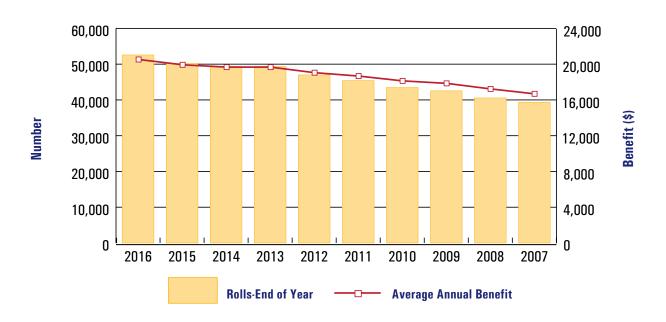
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

Added	to Rolls	Removed	from Rolls	Rolls -	Rolls – End of Year			Percent	
Number	Annual Benefits	Number	Annual Benefits	Number	Total Annual Benefits ^{1,2}	(Decrease) In Total Annual Benefits	Average Annual Benefit ²	Increase / (Decrease) in Average Annual Benefit	
3,466	\$ 95,994	1,105	\$ 14,677	52,575	\$ 1,082,306	7.8 %	\$ 20,586	3.0 %	
1,886	50,261	1,017	14,293	50,214	1,003,910	3.1	19,993	1.3	
-	93,605	-	14,524	49,345	973,635	-	19,731	-	
3,422	93,605	1,077	14,524	49,345	973,635	8.4	19,731	3.3	
2,541	63,923	962	12,216	47,000	898,006	5.6	19,107	2.0	
3,003	77,290	1,060	13,121	45,421	850,711	7.6	18,729	3.0	
1,940	47,657	1,010	11,982	43,478	790,773	3.8	18,188	1.5	
2,344	56,819	929	11,062	42,548	762,067	8.7	17,911	3.6	
2,296	52,167	966	11,026	40,554	701,155	6.5	17,289	3.3	
2,292	52,947	1,063	12,167	39,328	658,297	5.4	16,739	3.2	
	3,466 1,886 - 3,422 2,541 3,003 1,940 2,344 2,296	Number Benefits 3,466 \$ 95,994 1,886 50,261 - 93,605 3,422 93,605 2,541 63,923 3,003 77,290 1,940 47,657 2,344 56,819 2,296 52,167	Number Annual Benefits Number 3,466 \$ 95,994 1,105 1,886 50,261 1,017 - 93,605 - 3,422 93,605 1,077 2,541 63,923 962 3,003 77,290 1,060 1,940 47,657 1,010 2,344 56,819 929 2,296 52,167 966	Number Annual Benefits Number Annual Benefits 3,466 \$ 95,994 1,105 \$ 14,677 1,886 50,261 1,017 14,293 - 93,605 - 14,524 3,422 93,605 1,077 14,524 2,541 63,923 962 12,216 3,003 77,290 1,060 13,121 1,940 47,657 1,010 11,982 2,344 56,819 929 11,062 2,296 52,167 966 11,026	Number Annual Benefits Number Annual Benefits Number 3,466 \$ 95,994 1,105 \$ 14,677 52,575 1,886 50,261 1,017 14,293 50,214 - 93,605 - 14,524 49,345 3,422 93,605 1,077 14,524 49,345 2,541 63,923 962 12,216 47,000 3,003 77,290 1,060 13,121 45,421 1,940 47,657 1,010 11,982 43,478 2,344 56,819 929 11,062 42,548 2,296 52,167 966 11,026 40,554	Number Annual Benefits Number Annual Benefits Number Total Annual Benefits.1.2 3,466 \$ 95,994 1,105 \$ 14,677 52,575 \$ 1,082,306 1,886 50,261 1,017 14,293 50,214 1,003,910 - 93,605 - 14,524 49,345 973,635 3,422 93,605 1,077 14,524 49,345 973,635 2,541 63,923 962 12,216 47,000 898,006 3,003 77,290 1,060 13,121 45,421 850,711 1,940 47,657 1,010 11,982 43,478 790,773 2,344 56,819 929 11,062 42,548 762,067 2,296 52,167 966 11,026 40,554 701,155	Number Annual Benefits Number Annual Benefits Number Total Annual Benefits ^{1,2} Increase / (Decrease) In Total Annual Benefits 3,466 \$ 95,994 1,105 \$ 14,677 52,575 \$ 1,082,306 7.8 % 1,886 50,261 1,017 14,293 50,214 1,003,910 3.1 - 93,605 - 14,524 49,345 973,635 - 3,422 93,605 1,077 14,524 49,345 973,635 8.4 2,541 63,923 962 12,216 47,000 898,006 5.6 3,003 77,290 1,060 13,121 45,421 850,711 7.6 1,940 47,657 1,010 11,982 43,478 790,773 3.8 2,344 56,819 929 11,062 42,548 762,067 8.7 2,296 52,167 966 11,026 40,554 701,155 6.5	Number Annual Benefits Number Annual Benefits Number Total Annual Benefits 1.2 Increase / (Decrease) In Total Annual Benefits Average Annual Benefits 3,466 \$ 95,994 1,105 \$ 14,677 52,575 \$ 1,082,306 7.8 % \$ 20,586 1,886 50,261 1,017 14,293 50,214 1,003,910 3.1 19,993 - 93,605 - 14,524 49,345 973,635 - 19,731 3,422 93,605 1,077 14,524 49,345 973,635 8.4 19,731 2,541 63,923 962 12,216 47,000 898,006 5.6 19,107 3,003 77,290 1,060 13,121 45,421 850,711 7.6 18,729 1,940 47,657 1,010 11,982 43,478 790,773 3.8 18,188 2,344 56,819 929 11,062 42,548 762,067 8.7 17,911 2,296 52,167 966	

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases. ²Annual benefits includes members selecting an annuity for their ASA.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit



³The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

⁴The end of year number of benefit recipients are not equal to prior end of year number of benefit recipients plus additions less removals due to reclassifications between Pre-1996 Account and 1996 Account

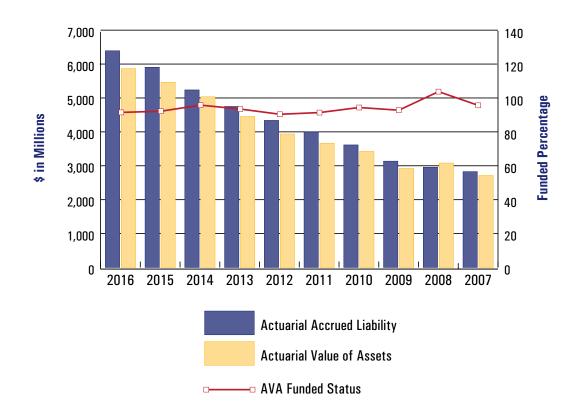
Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	Ac	tuarial crued lity (AAL)	Va	tuarial lue of ts (AVA)	Lia	funded ability¹ _ – AVA)	AVA Funded Status (AVA/AAL)		Covered Payroll ²	Unfunded Lia as a percent of Covered Pa	tage
2016	\$	6,391.8	\$	5,865.8	\$	526.0	91.8 %	6 \$	2,881.4		18.3 %
2015		5,905.7		5,461.2		444.5	92.5		2,742.2		16.2
2014		5,237.0		5,035.2		201.8	96.1		2,598.1		7.8
2013		4,749.3		4,453.8		295.5	93.8		2,442.5		12.1
2012		4,338.3		3,936.4		401.9	90.7		2,400.0		16.7
2011		3,996.8		3,664.6		332.2	91.7		2,225.0		14.9
2010		3,614.6		3,422.6		192.0	94.7		2,200.0		8.7
2009		3,135.5		2,920.7		214.8	93.1		2,075.0		10.4
2008		2,957.8		3,080.1		(122.3)	104.1		1,825.0	((6.7)
2007		2,827.6		2,713.1		114.5	96.0		1,675.0		6.8

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section that uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).

²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.



Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Teachers' Retirement Fund 1996 Account were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2011 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change decreased the Actuarial Value of Assets, and therefore increased the Unfunded Actuarial Accrued Liability of the plan by \$7.0 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Inflation: 2.25 percent per year

Cost of Living Increases: 1.00 percent per year in retirement

Future Salary Increases: Based on 2011-2014 experience. Illustrative rates shown below:

Years of Service	Inflation	Merit and Seniority	Total Individual Salary Growth
1	2.25 %	10.25 %	12.50 %
5	2.25	2.75	5.00
10	2.25	2.75	5.00
15	2.25	1.50	3.75
20	2.25	0.25	2.50
25	2.25	0.25	2.50
30	2.25	0.25	2.50
35	2.25	0.25	2.50
40	2.25	0.25	2.50

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2011-2014 Experience

Mortality (Healthy and Disabled):

RP-2014 White Collar Mortality Table, with Social Security generational improvements from 2006 based on the Social Security Administration's 2014 Trustee Report.

Retirement:

Regular	Retirement	Rule of 8	5 Retirement	Early Retirement			
Age	Age Probability		Probability	Age	Probability		
				50-53	2.0 %		
				54	5.0		
		55	15.0 %	55	5.0		
		56	15.0	56	5.0		
		57	15.0	57	6.5		
		58	15.0	58	8.0		
		59	20.0	59	12.0		
60	20.0 %	60	20.0				
61	25.0	61	25.0				
62	30.0	62	30.0				
63	35.0	63	35.0				
64	40.0	64	40.0				
65-69	45.0	65-69	45.0				
70+	100.0	70+	100.0				

Termination:

	Service Based		Age Based ¹						
Years of Service	Male	Female	Attained Age	Male	Female				
0	35.0 %	35.0 %	30	2.25 %	3.0 %				
1	14.0	14.0	35	2.25	3.0				
2	11.0	11.0	40	2.25	2.0				
3	9.0	9.0	45	2.25	2.0				
4	8.0	8.0	50	2.25	2.0				
5	7.0	7.0	55	2.25	2.0				
6	6.0	6.0	60	2.25	2.0				
7	5.0	5.5							
8	4.5	5.0							
9	4.5	4.5							

¹Age-based rates apply only if 10 or more years of service.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

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Age	Male	Female
25	0.01 %	0.01 %
30	0.01	0.01
35	0.01	0.01
40	0.01	0.01
45	0.02	0.02
50	0.05	0.05
55	0.09	0.09
60	0.10	0.10

Spouse/Beneficiary:

100 percent of members are assumed to be married for purposes of valuing death-in-service benefits. Male spouses are assumed to be three (3) years older than female spouses.

ASA Withdrawal:

Prior to April 1, 2017:

- 50% of active members who decrement while vested are assumed to withdraw their ASA balance immediately upon decrement.
- 50% of vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.
- 100% of active members who decrement prior to vesting are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of non-vested inactive members are assumed to withdraw their ASA balance immediately on the valuation date.

Beginning April 1, 2017:

- 100% of active members are assumed to withdraw their ASA balance immediately upon decrement.
- 100% of inactive members are assumed to withdraw their ASA balance immediately.

ASA Annuitization:

Prior to April 1, 2017:

- 50% of active members who decrement while vested are assumed to annuitize their ASA balance at their assumed retirement age.
- 50% of vested inactive members are assumed to annuitize their ASA balance at their assumed retirement age.
- The conversion rate is 4.5%.

Beginning April 1, 2017, assumes INPRS will outsource annuities to a third party for all ASA annuitizations.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

> The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

> This method produces a cost of future benefit accruals that is a level percent of pay over time, which is more desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method:

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method:

Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	UAAL			
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	444,519		
UAAL (Gain) / Loss				
Actuarial Value of Assets Experience		60,156		
Actuarial Accrued Liabilities Experience ¹		29,892		
Amortization of Existing Bases		(15,531)		
Actuarial Assumption & Methodology Changes ²		6,985		
Plan Provision Changes				
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	526,021		

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census

Solvency Test

(dollars in thousands)

		Actuarial Acci	ued Liabilities		_	Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Retirees and Contributions Beneficiaries		Active Member Total (Employer Actuarial Financed Accrued Portion) Liabilities		Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2016	\$ 1,204,885	\$ 1,091,802	\$ 4,095,063	\$ 6,391,750	\$ 5,865,729	100.0 %	100.0 %	87.2%	91.8 %	
2015	1,159,597	908,353	3,837,741	5,905,691	5,461,172	100.0	100.0	88.4	92.5	
2014	1,102,686	777,287	3,357,020	5,236,993	5,035,232	100.0	100.0	94.0	96.1	
2013	975,309	798,486	2,975,573	4,749,368	4,453,828	100.0	100.0	90.1	93.8	
2012	882,942	662,558	2,792,809	4,338,309	3,936,455	100.0	100.0	85.6	90.7	
2011	840,341	562,445	2,594,053	3,996,839	3,664,657	100.0	100.0	87.2	91.7	
2010	750,575	483,117	2,380,867	3,614,559	3,422,554	100.0	100.0	91.9	94.7	
2009	655,843	432,942	2,046,748	3,135,533	2,920,735	100.0	100.0	89.5	93.1	
2008	649,840	514,933	1,792,985	2,957,758	3,080,056	100.0	100.0	100.0	104.1	
2007	656,918	449,452	1,721,184	2,827,554	2,713,052	100.0	100.0	93.3	95.9	

assumptions.

²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

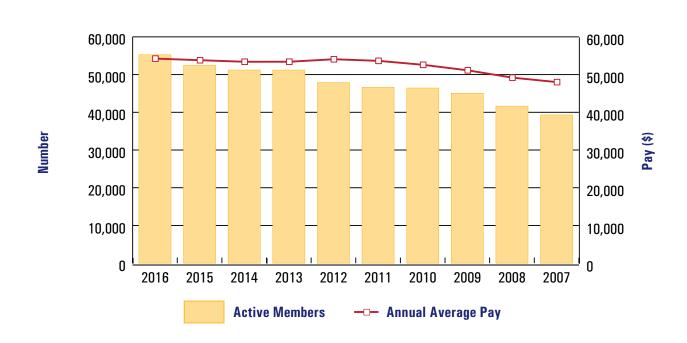
Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Anr	nual Payroll ¹	Annual Average Pay		Annual Percent Increase / (Decrease) In Average Pay
2016 ²	55,265	\$	3,004,169	\$	54,359	0.8 %
2015 ²	52,424		2,827,311		53,932	0.8
2014 ²	51,204		2,740,661		53,524	(0.0)
2013	51,204		2,740,940		53,530	(1.2)
2012	47,885		2,594,952		54,191	0.8
2011	46,633		2,507,193		53,764	2.0
2010	46,433		2,447,509		52,711	2.9
2009	45,046		2,308,548		51,249	3.9
2008	41,628		2,052,719		49,311	2.5
2007	39,307		1,891,605		48,124	11.8

¹Figures shown are the anticipated pay for the one-year period following the valuation date.

Total Number of Active Members Per Year and Annual Average Pay



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

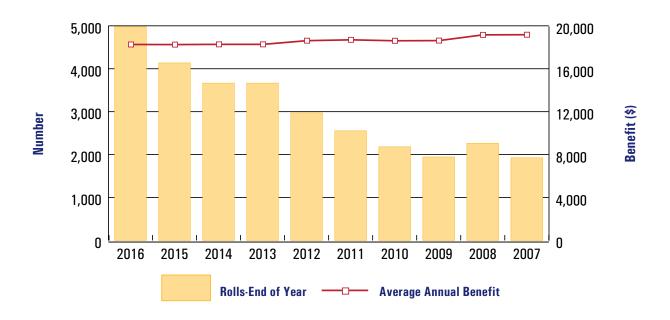
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added to Rolls		Removed from Rolls		Rolls – l	Rolls – End of Year					Percent	
	Number	Annual Benefits	Number		nual nefits	Number	(Dec Total Annual Tota		Increase / (Decrease) In Total Annual Benefits	Average Annual Benefit ²		Increase / (Decrease) in Average Annual Benefit
2016 ³	858	\$ 16,075	17	\$	305	4,977	\$	91,160	20.4 %	\$	18,316	0.1 %
2015 ³	499	9,101	28		353	4,136		75,714	12.7		18,306	(0.1)
2014 ³	-	12,216	-		251	3,665		67,169	-		18,327	-
2013	712	12,216	18		251	3,665		67,169	21.1		18,327	(1.8)
2012	433	8,132	16		236	2,971		55,475	15.8		18,672	(0.4)
2011	390	7,666	17		253	2,554		47,887	17.7		18,750	0.5
2010	249	4,859	12		129	2,181		40,701	12.1		18,662	(0.1)
20094	270	5,145	10		119	1,944		36,312	(16.5)		18,679	(2.8)
2008	255	5,126	21		316	2,263		43,482	17.5		19,214	(0.1)
2007	197	3,658	22		416	1,925		37,013	45.4		19,228	0.2

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases. ²Annual benefits includes members selecting an annuity for their ASA.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit



³The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

⁴The end of year number of benefit recipients are not equal to prior end of year number of benefit recipients plus additions less removals due to reclassifications between Pre-1996 Account and 1996 Account

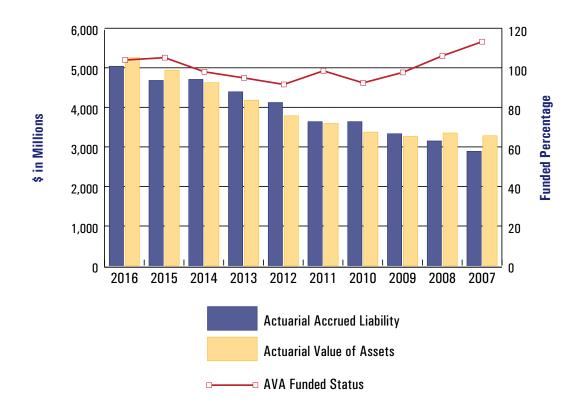
Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	Α	ctuarial ccrued ility (AAL)	Va	ctuarial alue of ets (AVA)	Unfunded Liability ¹ (AAL – AVA)		AVA Funded Status (AVA/AAL)	_	overed Payroll ²	Unfunded Liability ¹ as a percentage of Covered Payroll	
2016	\$	5,039.8	\$	5,255.2	\$	(215.4)	104.3 %	\$	771.9	(27.9) %	
2015		4,680.7		4,939.3		(258.6)	105.5		745.3	(34.7)	
2014		4,707.0		4,625.5		81.5	98.3		710.6	11.5	
2013		4,392.9		4,180.7		212.2	95.2		695.0	30.5	
2012		4,122.4		3,786.6		335.8	91.9		690.0	48.7	
2011		3,639.0		3,593.8		45.2	98.8		687.0	6.6	
2010		3,639.6		3,374.4		265.2	92.7		670.0	39.6	
2009 ³		3,332.7		3,265.6		67.1	98.0		330.0	20.3	
20084		3,150.8		3,352.7		(201.9)	106.4		635.0	(31.8)	
20074		2,889.3		3,281.5		(392.2)	113.6		585.0	(67.0)	

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section which uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).

³Covered payroll represents only a half year of activity. ⁴Actuarial Valuations from 2007-2008 were based off of a December year end.



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the 1977 Police Officers' and Firefighters' Pension and Disability Fund were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$10.7 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Interest on Member Contributions: 3.50 percent per year

Inflation: 2.25 percent per year

Cost of Living Increases: 2.00 percent per year in retirement

Future Salary Increases: 2.50 percent per year, which includes inflation

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled): RP-2014 Blue Collar mortality tables, with Social Security generational improvements from

2006 based on the Social Security Administration's 2014 Trustee report.

Retirement:

Ages	Service <32	Service >= 32
45-51	10 %	100 %
52-57	10	20
58-61	15	20
62-64	20	20
65-69	50	50
70+	100	100

Termination:

Service	Rate	Service	Rate
0	10.0 %	6-8	2.0 %
1	5.0	9-11	1.5
2	4.0	12-19	1.0
3-4	3.5	20+	2.0
5	2.5		

Disability:

Age	Rate	Age	Rate
<32	0.10 %	48	0.42 %
33	0.12	49	0.44
34	0.14	50	0.46
35	0.16	51	0.48
36	0.18	52	0.50
37	0.20	53	0.52
38	0.22	54	0.54
39	0.24	55	0.56
40	0.26	56	0.58
41	0.28	57	0.60
42	0.30	58	0.62
43	0.32	59	0.64
44	0.34	60	0.66
45	0.36	61	0.68
46	0.38	62+	0.70
47	0.40		

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Spouse/Beneficiary: 80 percent of male members and 50 percent of female members are assumed to be married or to have a dependent

beneficiary. Male members are assumed to be three (3) years older than females and female members are assumed to

be the same age as males.

For members hired after 1989 that become disabled, impairments are assumed to be 45 percent Class 1 (at 65 percent Disability Retirement:

of salary), 10 percent Class 2 (at 50 percent of salary), and 45 percent Class 3 (at 36 percent of salary).

Pre-Retirement Death: Of active member deaths, 10 percent are assumed to be in the line of duty and 90 percent are other than in the line of

duty. Additionally, all deaths among retired and disabled members are other than in the line of duty.

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

This method produces a cost of future benefit accruals that is a level percent of pay over time, which is more desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method:

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method:

Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	UAAL		
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	(258,636)	
UAAL (Gain) / Loss			
Actuarial Value of Assets Experience		9,332	
Actuarial Accrued Liabilities Experience ¹		41,724	
Amortization of Existing Bases		2,864	
Actuarial Assumption & Methodology Changes ²		(10,703)	
Plan Provision Changes			
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	(215,419)	

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census

Solvency Test

(dollars in thousands)

		Actuarial Accr	ued Liabilities					Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Contributions	ember Retirees and Financed Accrued		Actuarial Accrued		_	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2016	\$ 843,628	\$ 1,532,936	\$ 2,663,272	\$	5,039,836	\$	5,255,255	100.0 %	100.0 %	108.1 %	104.3 %	
2015	832,760	1,362,021	2,485,913		4,680,694		4,939,330	100.0	100.0	110.4	105.5	
2014	809,877	1,280,920	2,616,200		4,706,997		4,625,475	100.0	100.0	96.9	98.3	
2013	782,124	1,288,457	2,322,366		4,392,947		4,180,704	100.0	100.0	90.9	95.2	
2012	728,892	1,135,538	2,258,006		4,122,436		3,786,595	100.0	100.0	85.1	91.9	
2011	679,849	970,676	1,988,431		3,638,956		3,593,787	100.0	100.0	97.7	98.8	
2010	634,865	859,626	2,145,178		3,639,669		3,374,438	100.0	100.0	87.6	92.7	
2009	571,534	793,167	1,967,985		3,332,686		3,265,598	100.0	100.0	96.6	98.0	
20081	534,303	765,909	1,850,615		3,150,827		3,352,705	100.0	100.0	100.0	106.4	
20071	498,662	655,827	1,734,806		2,889,295		3,281,480	100.0	100.0	100.0	113.6	

¹As of December 31 instead of June 30.

assumptions.

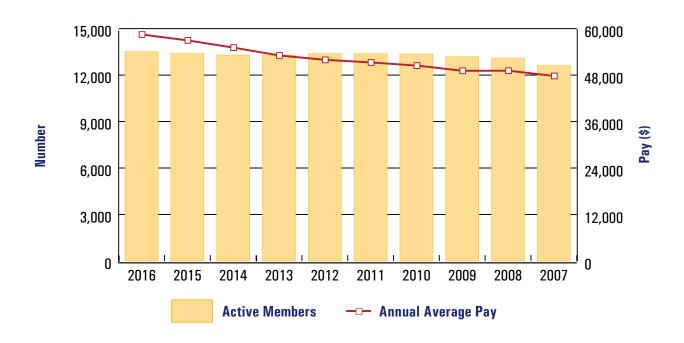
²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Ann	ual Payroll¹	Annu	ıal Average Pay	Annual Percent Increase / (Decrease) In Average Pay
2016 ²	13,506	\$	791,508	\$	58,604	2.7 %
2015 ²	13,390		764,215		57,074	3.4
2014 ²	13,295		734,024		55,211	3.8
2013	13,287		706,603		53,180	2.1
2012	13,390		697,111		52,062	1.3
2011	13,376		687,342		51,386	1.6
2010	13,362		675,797		50,576	2.7
2009	13,184		649,018		49,228	-
2008 ³	13,095		644,936		49,251	2.8
20073	12,611		603,963		47,892	3.5

Total Number of Active Members Per Year and Annual Average Pay



¹Figures shown are the anticipated pay for the one-year period following the valuation date.

²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

³As of December 31 instead of June 30.

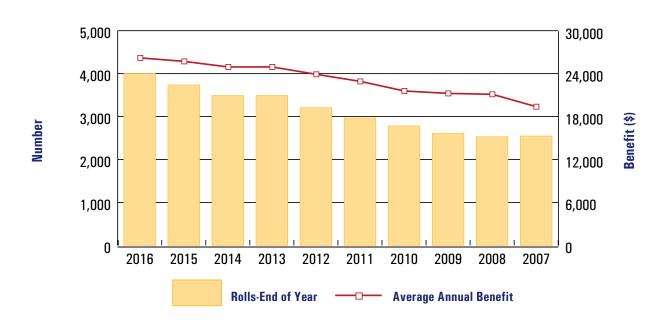
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added	to Rolls	Removed from Rolls		s	Rolls – End of Year			Percent		Percent
	Number	Annual Benefits	Number	Annua Benefi		Number		tal Annual Benefits ¹	Increase / (Decrease) In Total Annual Benefits	verage Annual Benefit	Increase / (Decrease) in Average Annual Benefit
2016 ²	312	\$ 10,074	44	\$ 8	34	4,004	\$	105,218	9.2 %	\$ 26,278	1.9 %
2015 ²	283	8,858	38	7.	27	3,736		96,336	10.3	25,786	3.1
2014 ²	-	-	-		-	3,491		87,301	-	25,008	-
2013	326	10,098	43	8	45	3,491		87,301	13.5	25,008	4.3
2012	281	7,900	39	8	14	3,208		76,917	12.8	23,977	4.3
2011	218	6,179	34	6	09	2,966		68,179	13.2	22,987	6.2
2010	208	4,918	34	6	41	2,782		60,220	8.4	21,646	1.6
2009	102	2,571	24	4	79	2,608		55,564	3.7	21,305	0.6
2008 ³	255	5,861	273	4,5	35	2,530		53,588	8.2	21,181	8.9
20073	333	8,101	50	8	36	2,548		49,537	18.0	19,442	4.9

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

⁴As of December 31 instead of June 30.

Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	Ad	ctuarial ccrued lity (AAL)	Val	uarial ue of ts (AVA)	Lia	funded ability¹ L – AVA)	AVA Funded Status (AVA/AAL)	overed ayroll ²	Unfunded L as a perce of Covered	entage
2016	\$	501.1	\$	469.4	\$	31.7	93.7 %	\$ 51.4		61.7 %
2015		468.9		447.5		21.4	95.4	48.6		44.1
2014		464.9		419.6		45.3	90.3	46.0		98.5
2013 ³		453.1		381.2		71.9	84.1	47.6		151.1
2012		437.9		260.1		177.8	59.4	45.1		393.9
2011		400.3		248.6		151.7	62.1	45.8		331.5
2010		364.1		242.1		122.0	66.5	36.7		332.2
2009		330.6		241.0		89.6	72.9	36.2		247.5
2008		338.8		234.9		103.9	69.3	33.7		308.1
2007		284.0		211.8		72.2	74.6	29.7		243.0

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section that uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.

³The State of Indiana contributed additional monies of \$90,187 thousand.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Judges' Retirement System were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$1.1 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Interest on Member Contributions: 3.50 percent per year

Inflation: 2.25 percent per year

Cost of Living Increases: 2.50 percent per year in deferral and retirement

Future Salary Increases: 2.50 percent per year, which includes inflation

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled):

RP-2014 White Collar mortality tables, with Social Security generational improvements from 2006 based on the Social Security Administration's 2014 Trustee report.

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Age	Service <22	Age	Service >=22
62	25 %	55-74	70 %
63	15	75+	100
64	10		
65	50		
66-74	30		
75+	100		

Termination:

3 percent per year for all members prior to retirement eligibility.

Disability:

1964 OASDI Table. Illustrative rates shown below:

Age	Rate
20	0.060 %
25	0.085
30	0.110
35	0.147
40	0.220
45	0.360
50	0.606
55	1.009
60	1.627
65+	0.000

Spouse/Beneficiary:

90 percent of members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method: For funding, gains and losses occurring from census experience different than assumed, assumption

changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method: Member census data as of the prior year end was used in the valuation and adjusted, where

appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement

date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and

losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is

limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB

Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	UAAL			
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	21,430		
UAAL (Gain) / Loss				
Actuarial Value of Assets Experience		5,011		
Actuarial Accrued Liabilities Experience ¹		7,182		
Amortization of Existing Bases		(799)		
Actuarial Assumption & Methodology Changes ²		(1,076)		
Plan Provision Changes				
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	31,748		

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census assumptions. A significant assumption is Cost-of-Living Adjustment (COLA), which is a loss of approximately \$1,788 thousand as benefit recipients received 3.10% COLA effective July 1, 2016, rather than the assumed 2.50%.

²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Solvency Test

(dollars in thousands)

		Actuarial Acc	rued Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets					
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities		
2016	\$ 34,804	\$ 244,484	\$ 221,838	\$ 501,126	\$ 469,378	100.0 %	100.0 %	85.7 %	93.7 %		
2015	32,383	210,020	226,542	468,945	447,514	100.0	100.0	90.5	95.4		
2014	32,060	216,044	216,751	464,855	419,568	100.0	100.0	79.1	90.3		
2013¹	29,060	224,132	199,918	453,110	381,240	100.0	100.0	64.1	84.1		
2012	27,699	205,341	204,814	437,854	260,096	100.0	100.0	13.2	59.4		
2011	24,359	198,797	177,118	400,274	248,623	100.0	100.0	14.4	62.1		
2010	23,138	182,023	158,962	364,123	242,143	100.0	100.0	23.3	66.5		
2009	21,649	170,962	137,940	330,551	240,954	100.0	100.0	35.0	72.9		
2008	22,243	155,177	161,329	338,749	234,881	100.0	100.0	35.6	69.3		
2007	21,276	143,645	119,074	283,995	211,747	100.0	100.0	39.3	74.6		

¹In accordance with Legislation passed during March 2012, the State appropriated \$90,187 thousand during FY2013 to reach a funded status of 80.0 percent based on the actuarial valuation as of June 30, 2012.

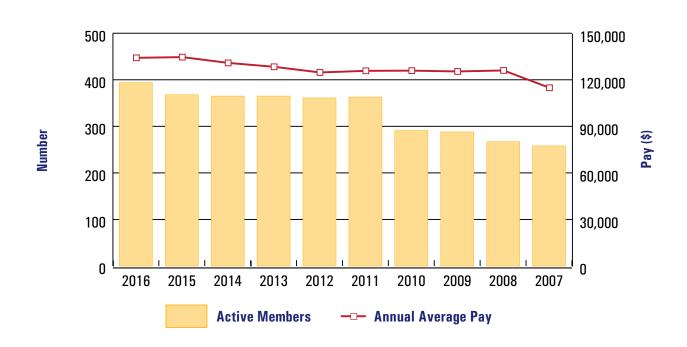
Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Annı	ual Payroll ¹	Annı	ual Average Pay	Annual Percent Increase / (Decrease) In Average Pay		
2016 ²	394	\$	52,975	\$	134,454	(0.3) %		
2015 ²	368		49,651		134,921	2.8		
2014 ²	365		47,883		131,186	2.0		
2013	365		46,967		128,676	2.9		
2012	361		45,138		125,036	(0.8)		
2011	363		45,764		126,072	(0.1)		
2010	291		36,722		126,192	0.4		
2009	288		36,196		125,680	(0.5)		
2008	267		33,729		126,327	9.7		
2007	258		29,712		115,163	(7.4)		

¹Figures shown are the anticipated pay for the one-year period following the valuation date.

Total Number of Active Members Per Year and Annual Average Pay



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

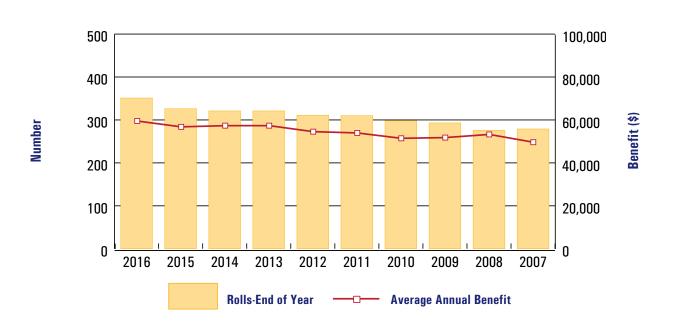
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added to Rolls		Removed	from Rolls	Rolls -	End o	of Year	Percent			Percent
	Number	Annual Benefits	Number	Annual Benefits	Number			Increase / (Decrease) In Total Annual Benefits	Average Annual Benefit		Increase / (Decrease) in Average Annual Benefit
2016 ²	34	\$ 2,520	9	\$ 340	351	\$	20,959	12.8 %	\$	59,714	4.8 %
2015 ²	10	494	5	195	326		18,578	0.6		56,987	(1.0)
2014 ²	-	-	-	-	321		18,474	-		57,551	-
2013	24	1,798	14	442	321		18,474	8.5		57,551	5.1
2012	7	444	6	194	311		17,028	1.4		54,751	1.1
2011	21	1,452	9	200	310		16,787	9.1		54,152	4.9
2010	11	627	6	339	298		15,390	1.1		51,644	(0.6)
2009	74	3,744	57	1,835	293		15,230	3.2		51,978	(2.8)
2008	23	1,257	26	991	276		14,754	6.1		53,455	7.3
2007	18	976	8	409	279		13,899	7.1		49,819	3.2

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases. ³The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit



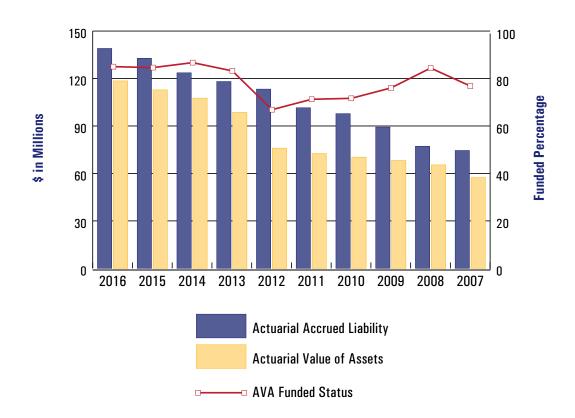
Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	Ad	tuarial ccrued lity (AAL)	Val	uarial ue of s (AVA)	Unfunded Liability¹ (AAL – AVA)		AVA Funded Status (AVA/AAL)	Covered Payroll ²		Unfunded Liability ¹ as a percentage of Covered Payroll	
2016	\$	138.9	\$	118.5	\$	20.4	85.3 %	\$	25.5	80.1 %	
2015		132.8		112.8		20.0	84.9		25.1	79.7	
2014		123.6		107.6		16.0	87.0		25.8	62.1	
2013 ³		118.1		98.6		19.5	83.5		24.7	79.0	
2012		113.3		76.0		37.3	67.1		24.3	153.5	
2011		101.5		72.6		28.9	71.5		25.0	115.6	
2010		97.8		70.3		27.5	71.9		25.3	108.7	
2009		89.3		68.2		21.1	76.3		25.5	82.7	
2008		77.2		65.4		11.8	84.7		23.7	49.8	
2007		74.5		57.4		17.0	77.1		21.0	81.1	

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section which uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).

³The State of Indiana contributed additional monies of \$14,619 thousand.



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS Funding Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$0.3 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Interest on Member Contributions: 3.50 percent per year

Inflation: 2.25 percent per year

Cost of Living Increases: 1.00 percent per year in retirement

Future Salary Increases: 2.50 percent per year, which includes inflation

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled): RP-2014 Blue Collar Set Mortality Table, with Social Security generational improvements

from 2006 based on the Social Security Administration's 2014 Trustee report.

Retirement:

Age	Rate
45	3 %
46-49	2
50	3
51-59	15
60-64	40
>=65	100

Termination:

Years of		Years of	
Service	Rate	Service	Rate
0-1	10.0 %	6	5.0 %
2	9.0	7	4.0
3	8.0	8	3.0
4	7.0	9	2.0
5	6.0	>=10	1.0

Disability:

150 percent of 1964 OASDI Table. Illustrative rates shown below:

Age	Rate	Age	Rate
20	0.0900 %	45	0.5400 %
25	0.1275	50	0.9090
30	0.1650	55	1.5135
35	0.2205	60	2.4405
40	0.3300	65+	0.0000

Spouse/Beneficiary:

90 percent of members are assumed to be married or to have a dependent beneficiary. Males are assumed to be three (3) years older than females.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method: For funding, gains and losses occurring from census experience different than assumed, assumption

changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method: Member census data as of the prior year end was used in the valuation and adjusted, where

appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement

date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and

losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is

limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB

Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	UAAL					
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$	20,031				
UAAL (Gain) / Loss						
Actuarial Value of Assets Experience		623				
Actuarial Accrued Liabilities Experience ¹		469				
Amortization of Existing Bases		(363)				
Actuarial Assumption & Methodology Changes ²		(311)				
Plan Provision Changes						
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$	20,449				

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census

Solvency Test

(dollars in thousands)

2007

		Actuarial Acc	rued Liab	ilities					Covered by Assets					
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries		oer oyer ced	Total Actuarial Accrued Liabilities		Actuarial Value of Assets		Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities		
2016	\$ 9,085	\$ 67,424	\$ 62	2,456	\$	138,965	\$	118,516	100.0 %	100.0 %	67.3 %	85.3 %		
2015	8,456	61,503	6	2,837		132,796		112,765	100.0	100.0	68.1	84.9		
2014	8,042	54,626	6	0,933		123,601		107,563	100.0	100.0	73.7	87.0		
2013¹	7,494	56,028	54	4,575		118,097		98,608	100.0	100.0	64.3	83.5		
2012	6,532	53,929	5	2,822		113,283		76,007	100.0	100.0	29.4	67.1		
2011	6,271	46,695	4	8,568		101,534		72,599	100.0	100.0	40.4	71.5		
2010	6,220	36,044	5	5,598		97,862		70,327	100.0	100.0	50.5	71.9		
2009	5,274	35,039	4	8,983		89,296		68,170	100.0	100.0	56.9	76.3		
2008	4,314	28,902	4:	3,961		77,177		65,375	100.0	100.0	73.2	84.7		

¹In accordance with Legislation passed during March 2012, the State appropriated \$14,619 thousand during FY2013 to reach a funded status of 80.0 percent based on the actuarial valuation as of June 30, 2012.

74,451

57,414

100.0

100.0

24,606

3,527

46,318

77.1

63.2

Portion of Actuarial Accrued Liabilities

assumptions.

²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

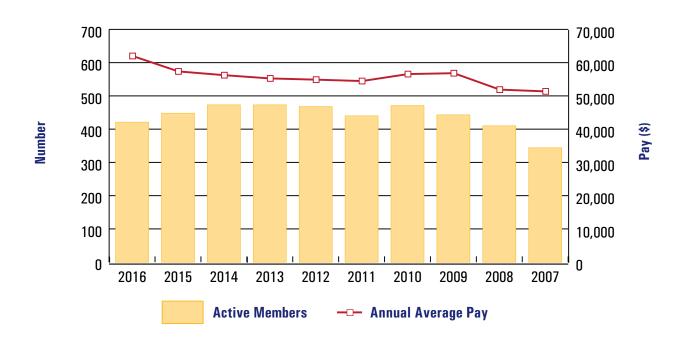
Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Annual Payroll ¹		Annu	ial Average Pay	Annual Percent Increase / (Decrease) In Average Pay		
2016 ²	421	\$	26,164	\$	62,147	8.1 %		
2015 ²	448		25,761		57,502	2.0		
2014 ²	473		26,664		56,372	1.8		
2013	473		26,201		55,393	0.7		
2012	468		25,752		55,026	0.8		
2011	440		24,028		54,609	(3.7)		
2010	471		26,709		56,707	(0.5)		
2009	443		25,238		56,971	9.5		
2008	410		21,333		52,033	1.0		
2007	344		17,715		51,497	7.2		

¹Figures shown are the anticipated pay for the one-year period following the valuation date.

Total Number of Active Members Per Year and Annual Average Pay



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

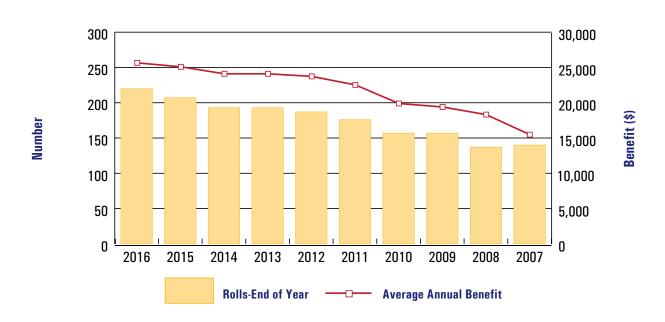
Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added	Added to Rolls		Removed	Removed from Rolls		Rolls - I	End o	f Year	Percent			Percent Increase /												
	Number		nual nefits	Number		nnual nefits	Number	Total Annual Benefits ¹														Increase / (Decrease) In Total Annual Benefits	1	verage Annual Benefit	(Decrease) in Average Annual Benefit
2016 ²	14	\$	506	1	\$	4	220	\$	5,661	8.7 %	\$	25,733	2.2 %												
2015 ²	15		556	1		5	207		5,210	11.7		25,170	4.1												
2014 ²	-		-	-		-	193		4,666	-		24,177	-												
2013	8		253	2		9	193		4,666	4.8		24,177	1.5												
2012	14		495	3		14	187		4,452	11.9		23,810	5.3												
2011	22		902	3		23	176		3,978	26.9		22,602	13.2												
2010	6		136	6		49	157		3,134	2.6		19,962	2.6												
2009	59		748	39		258	157		3,056	21.3		19,465	5.9												
2008	9		302	12		119	137		2,518	15.8		18,382	18.3												
2007	13		359	5		74	140		2,176	15.2		15,539	8.6												

1End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases. ²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

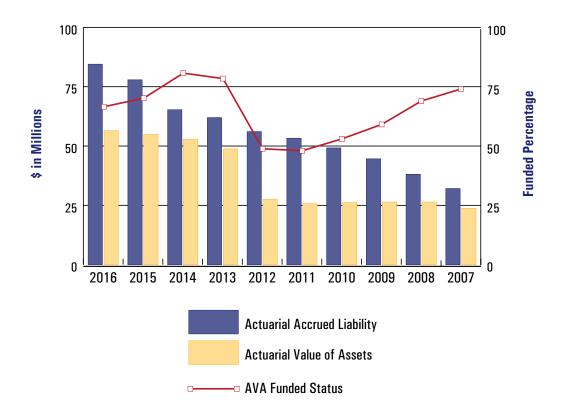


Historical Summary of Actuarial Valuation Results Actuarial Valuation as of June 30

(dollars in millions)

	Ac	tuarial crued ity (AAL)	Actuar Value Assets (of	Lia	unded bility¹ . – AVA)	AVA Funded Status (AVA/AAL)	vered yroll ²	Unfunded Liability ¹ as a percentage of Covered Payroll
2016	\$	85.0	\$	56.4	\$	28.6	66.4 %	\$ 21.4	133.6 %
2015		77.9		54.9		23.0	70.4	21.1	108.8
2014		65.3		52.9		12.4	81.0	20.6	60.2
2013 ³		62.0		48.8		13.2	78.7	18.8	70.2
2012		56.1		27.5		28.6	49.0	21.7	131.8
2011		53.3		25.7		27.6	48.2	18.1	152.6
2010		49.2		26.2		23.0	53.2	21.0	109.4
2009		44.6		26.4		18.2	59.3	20.8	87.6
2008		38.1		26.4		11.7	69.2	20.6	56.8
2007		32.1		23.8		8.2	74.3	18.1	45.5

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section that uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).



²Covered Payroll can also be found in the RSI Contribution Schedule in the Financial Section. ³The State of Indiana contributed additional monies of \$17,363 thousand.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Prosecuting Attorneys' Retirement Fund were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 20-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a prospective basis, beginning with the June 30, 2016 actuarial valuation. Amortization bases established prior to June 30, 2016 will continue to be amortized over their original amortization period, even if the remaining period is greater than 20 years at June 30, 2016. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$0.2 million at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Interest on Member Contributions: 3.50 percent per year

Inflation: 2.25 percent per year

Cost of Living Increases: N/A

Future Salary Increases: 4.00 percent per year, which includes inflation

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled):

RP-2014 White Collar mortality tables, with Social Security generational improvements from 2006 based on the Social Security Administration's 2014 Trustee report.

100

 Age
 Service < 22</th>
 Service >= 22

 55-61
 0 %
 70 %

 62-64
 20
 70

>=65

Termination: 10 percent per year for all members prior to retirement eligibility.

Disability:

Age	Male	Female
20	0.0067 %	0.0050 %
30	0.0208	0.0158
40	0.0646	0.0496
50	0.2005	0.1556
60	0.6220	0.4881
70	0.1000	0.1000
71+	0.0000	0.0000

100

Spouse/Beneficiary: 90 percent of members are assumed to be married or to have a dependent beneficiary. Males are

assumed to be three (3) years older than their spouses.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost Method: Entry Age Normal – Level Percent of Payroll

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

This method produces a cost of future benefit accruals that is a level percent of pay over time, which is desirable for employers from a budgeting standpoint. Other actuarial cost methods are more volatile in their allocation of cost for each year of member service.

Amortization Method: For funding, gains and losses occurring from census experience different than assumed, assumption

changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting and financial reporting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method: Member census data as of the prior year end was used in the valuation and adjusted, where

appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement

date.

Asset Valuation Method: Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and

losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is

limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB

Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	 UAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$ 23,012
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	2,027
Actuarial Accrued Liabilities Experience	4,058
Amortization of Existing Bases	(333)
Actuarial Assumption & Methodology Changes ¹	(203)
Plan Provision Changes	
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$ 28,561

¹The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Solvency Test

(dollars in thousands)

		Actuarial Acci	rued Liabilities			Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2016	\$ 26,206	\$ 37,709	\$ 21,118	\$ 85,03	3 \$ 56,472	100.0 %	80.3 %	- %	66.4 %	
2015	25,479	26,636	25,746	77,86	1 54,848	100.0	100.0	10.6	70.4	
2014	26,654	22,665	16,017	65,33	6 52,936	100.0	100.0	22.6	81.0	
2013¹	25,371	22,004	14,565	61,94	0 48,762	100.0	100.0	9.5	78.7	
2012	23,406	18,660	14,014	56,08	0 27,501	100.0	21.9	-	49.0	
2011	21,592	16,806	14,854	53,25	2 25,651	100.0	24.2	-	48.2	
2010	20,999	12,557	15,618	49,17	4 26,166	100.0	41.1	-	53.2	
2009	19,239	10,384	15,009	44,63	2 26,467	100.0	69.6	-	59.3	
2008	17,428	5,173	15,468	38,06	9 26,350	100.0	100.0	24.2	69.2	
2007	16,014	3,192	12,846	32,05	2 23,815	100.0	100.0	35.9	74.3	

¹In accordance with Legislation passed during March 2012, the State appropriated \$17,363 thousand during FY2013 to reach a funded status of 80.0 percent based on the actuarial valuation as of June 30, 2012.

Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Annual Payroll ¹		Ann	ual Average Pay	Annual Percent Increase / (Decrease) In Average Pay		
2016 ²	197	\$	22,227	\$	112,827	0.6 %		
2015 ²	196		21,991		112,198	9.9		
2014 ²	210		21,432		102,057	1.0		
2013	210		21,217		101,033	1.9		
2012	219		21,705		99,110	16.2		
2011	212		18,082		85,292	(11.9)		
2010	217		21,016		96,848	3.0		
2009	221		20,782		94,037	(4.7)		
2008	209		20,617		98,646	12.3		
2007	206		18,092		87,825	(0.4)		

¹Figures shown are the anticipated pay for the one-year period following the valuation date.

Total Number of Active Members Per Year and Annual Average Pay



²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

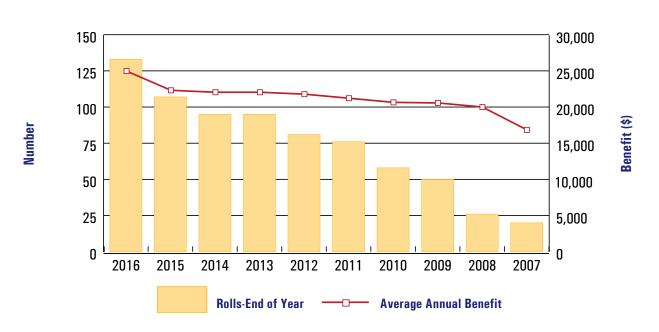
(dollars in thousands - except average annual benefit)

	Added	to Ro	olls	Removed	from	Rolls	Rolls - I	End o	f Year	Percent	rease / rease) In Average I Annual Annual		Percent Increase / (Decrease) in Average Annual Benefit	
	Number		nnual nefits	Number		nnual enefits	Number		al Annual enefits¹	(Decrease) In Total Annual Benefits				
2016 ²	26	\$	937	-	\$	-	133	\$	3,332	39.1 %	\$	25,056	11.9 %	
2015 ²	14		319	2		14	107		2,395	14.0		22,385	1.2	
2014 ²	-		-	-		-	95		2,101	-		22,118	-	
2013	15		362	1		27	95		2,101	18.7		22,118	1.2	
2012	6		178	1		27	81		1,770	9.4		21,853	2.7	
2011	19		473	1		16	76		1,618	34.7		21,288	2.8	
2010	9		187	1		16	58		1,201	16.4		20,715	0.4	
2009	26		536	2		26	50		1,032	97.8		20,636	2.8	
2008	7		207	1		14	26		522	54.3		20,068	18.7	
2007	4		121	2		32	20		338	35.6		16,905	22.1	

¹End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases.

³The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

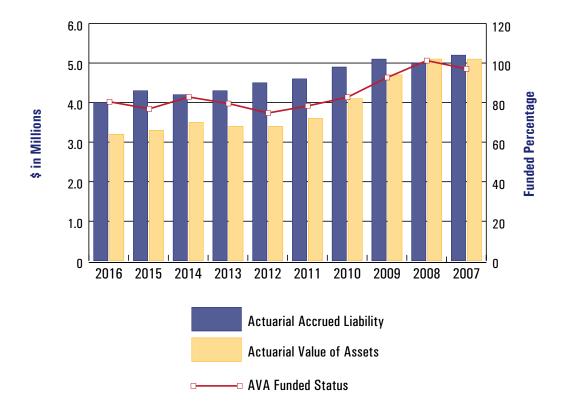


Historical Summary of Actuarial Valuation Results **Actuarial Valuation as of June 30**

(dollars in millions)

	Acc	ıarial rued y (AAL)	Actuaria Value of Assets (AV		Liab	nded ility¹ - AVA)	AVA Funded Status (AVA/AAL)	Covered Payroll ²	Unfunded Liability ¹ as a percentage of Covered Payroll
2016	\$	4.0	\$	3.2	\$	0.8	80.7 %	N/A	N/A
2015		4.3		3.3		1.0	77.1	N/A	N/A
2014		4.2		3.5		0.7	83.1	N/A	N/A
2013		4.3		3.4		0.9	79.8	N/A	N/A
2012		4.5		3.4		1.1	75.0	N/A	N/A
2011		4.6		3.6		1.0	78.6	N/A	N/A
2010		4.9		4.1		0.8	83.0	N/A	N/A
2009		5.1		4.7		0.4	93.0	N/A	N/A
2008		5.0		5.1		(0.1)	101.6	N/A	N/A
2007		5.2		5.1		0.1	97.4	N/A	N/A

¹The Unfunded Liability is calculated using the Actuarial Value of Assets (AVA), which is different than Net Pension Liability in the Financial Section which uses the Plan Fiduciary Net Position, also known as the Market Value of Assets (MVA).



²Is a closed plan with no Covered Payroll.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions

he actuarial assumptions and methods used in the June 30, 2016 valuation of the Legislators' Defined Benefit Plan were adopted by the INPRS Board in April 2016. The majority of the actuarial assumptions and methods are based on plan experience from July 1, 2010 through June 30, 2014, and were first used in the June 30, 2015 valuation. The INPRS Board adopted a funding policy in April 2014, and the policy was last updated in April 2016. The funding policy is available online at: www.in.gov/inprs/files/INPRS_Funding_Policy.pdf.

Changes in Actuarial Assumptions

For the actuarial valuation as of June 30, 2016, there were no changes to the actuarial assumptions from the actuarial valuation as of June 30, 2015.

Changes in Actuarial Methods

The INPRS Board approved the following changes in methods, effective June 30, 2016:

For funding purposes and when the plan is below 100% funded (based on Actuarial Value of Assets), gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes will be amortized over a 5-year period with level payments each year, rather than a 30-year period. A new gain or loss base will continue to be established each year. This change is made on a retroactive basis, beginning with the June 30, 2016 actuarial valuation, such that bases established prior to June 30, 2016 will be eliminated and the entire Unfunded Actuarial Accrued Liability will be amortized over 5 years. If the plan is at or above 100% funded (based on Actuarial Value of Assets), the methodology of treating past amortization bases as fully amortized and amortizing the entire surplus over an open 30-year period is unchanged.

For funding purposes, the smoothing period for investment gains and losses in the development of the Actuarial Value of Assets was increased from four years to five years at June 30, 2016. This change was implemented retroactively in that the Actuarial Value of Assets at June 30, 2016 and was computed as if the five-year amortization period for recognizing investment gains and losses had always been in effect. This change increased the Actuarial Value of Assets, and therefore decreased the Unfunded Actuarial Accrued Liability of the plan by \$30 thousand at June 30, 2016.

Changes in Plan Provisions

There were no changes to the plan provisions that impacted the pension benefits during the fiscal year.

Actuarial Assumptions

Except as noted below, actuarial assumptions used for funding purposes are the same as those used for accounting and financial reporting.

Economic Assumptions

Interest Rate / Investment Return:

Funding 6.75 percent (net of administrative and investment expenses)

Accounting & Financial Reporting 6.75 percent (net of investment expenses)

Inflation: 2.25 percent per year

Cost of Living Increases: 1.00 percent per year in retirement

Future Salary Increases: 2.25 percent per year, which includes inflation

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Demographic Assumptions: Based on 2010-2014 Experience

Mortality (Healthy and Disabled): RP-2014 White Collar mortality tables, with Social Security generational improvements from 2006

based on the Social Security Administration's 2014 Trustee Report.

Retirement:

Age	Rate
55	10 %
56-57	8
58-61	2
62-64	5
65+	100

Termination: Sarason T-2 Tables. Illustrative rates shown below:

Age	Rate	Age	Rate
20	5.4384 %	40	3.5035 %
25	5.2917	45	1.7686
30	5.0672	50	0.4048
35	4.6984	55+	0.0000

Disability: 75 percent of 1964 OASDI Table. Illustrative rates shown below:

Age	Rate	Age	Rate
20	0.045 %	45	0.270 %
25	0.064	50	0.454
30	0.083	55	0.757
35	0.111	60	1.220
40	0.165	65+	0.000

Spouse/Beneficiary: 90 percent of members are assumed to be married or to have a dependent beneficiary. Male members are

assumed to be three (3) years older than their spouses.

Summary of Actuarial Assumptions, Actuarial Methods and Plan Provisions, continued

Actuarial Methods

Funding uses the same Actuarial Methods as accounting and financial reporting, except where noted.

Actuarial Cost & Amortization

Methods:

Funding:

Traditional Unit Credit

The normal cost is calculated separately for each active member and is equal to actuarial present value of additional benefits expected to be accrued during the year following the valuation date. The actuarial accrued liability on any valuation date is the actuarial present value of the benefits earned for service prior to the valuation date. Since the benefits for all members of the Legislator's Defined Benefit Plan are fixed and no longer increasing with future service credit or future salary increases, applying the Traditional Unit Credit cost method results in the Actuarial Accrued Liability being equal to the Present Value of Future Benefits (i.e. all benefits are treated as though they are attributable to past service) and the Normal Cost being equal to \$0. This is consistent with the actual status of member benefit accruals.

Gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a five-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new five-year period. However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payment each year. The purpose of the method is to give a smooth progression of the costs from year-to-year and, at the same time, provide for an orderly funding of the unfunded liabilities.

Accounting & Financial Reporting:

Entry Age Normal- Level Percent of Payroll

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

Gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Actuarial (Liability) Valuation Method:

Member census data as of the prior year end was used in the valuation and adjusted, where appropriate, to reflect changes during the current fiscal year. Standard actuarial roll forward techniques were then used to project the liabilities computed as of prior year end to the current year measurement date.

Asset Valuation Method:

Funding uses the Actuarial Value of Assets (AVA), which is equal to a five-year smoothing of gains and losses on the Market Value of Assets (MVA), subject to a 20 percent corridor. Accordingly, the AVA is limited to no more than 20 percent greater than or 20 percent less than the MVA.

Accounting and financial reporting uses the Market Value of Assets (MVA) in accordance with GASB Statement No. 67.

Plan Provisions

Please refer to Note 1 of the Notes to the Financial Statements in the Financial Section.

Analysis of Financial Experience

(dollars in thousands)	 JAAL
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2015	\$ 991
UAAL (Gain) / Loss	
Actuarial Value of Assets Experience	84
Actuarial Accrued Liabilities Experience ¹	(232)
Amortization of Existing Bases	(38)
Actuarial Assumption & Methodology Changes ²	(30)
Plan Provision Changes	
Unfunded Actuarial Accrued Liability (UAAL): June 30, 2016	\$ 775

¹Actuarial Accrued Liabilities Experience represents actual experience versus expected experience of the actuarial census assumptions. A significant assumption is Cost-of-Living Adjustment (COLA), which is a gain of approximately \$36 thousand as benefit recipients received 0.00% COLA effective January 1, 2017, rather than the assumed 1.00%. ²The smoothing period for investment gains and losses in the development of the actuarial value of assets was increased from four (4) years to five (5) years.

Solvency Test

(dollars in thousands)

		Actuarial Acci	rued Liabilities		_	Portion of Actuarial Accrued Liabilities Covered by Assets				
Actuarial Valuation as of June 30	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	
2016	\$ -	\$ 3,207	\$ 809	\$ 4,016	\$ 3,241	N/A	100.0 %	4.2 %	80.7 %	
2015	-	3,213	1,115	4,328	3,336	N/A	100.0	11.1	77.1	
2014	-	3,076	1,097	4,173	3,467	N/A	100.0	35.7	83.1	
2013	-	3,192	1,103	4,295	3,428	N/A	100.0	21.4	79.8	
2012	-	3,031	1,472	4,503	3,377	N/A	100.0	23.5	75.0	
2011	-	3,037	1,584	4,621	3,634	N/A	100.0	37.7	78.6	
2010	-	3,017	1,892	4,909	4,075	N/A	100.0	55.9	83.0	
2009	-	3,147	1,940	5,087	4,730	N/A	100.0	81.6	93.0	
2008	-	2,258	2,781	5,039	5,120	N/A	100.0	100.0	101.6	
2007	-	2,432	2,737	5,169	5,035	N/A	100.0	95.1	97.4	

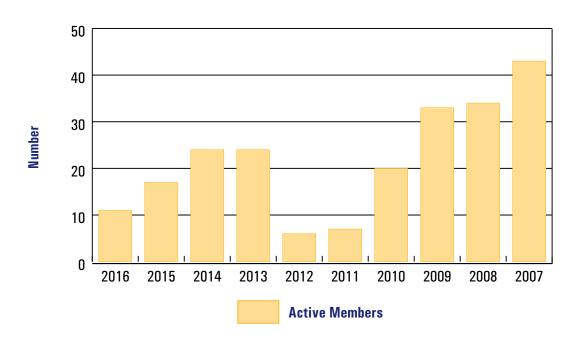
Schedule of Active Members Valuation Data Actuarial Valuation as of June 30

(dollars in thousands - except annual average pay)

	Active Members	Annual Payroll	Annual Average Pay	Annual Percent Increase / (Decrease) In Average Pay			
2016 ¹	11	N/A	N/A	N/A			
2015 ¹	17	N/A	N/A	N/A			
2014 ¹	24	N/A	N/A	N/A			
2013	24	N/A	N/A	N/A			
2012	6	N/A	N/A	N/A			
2011	7	N/A	N/A	N/A			
2010	20	N/A	N/A	N/A			
2009	33	N/A	N/A	N/A			
2008	34	N/A	N/A	N/A			
2007	43	N/A	N/A	N/A			

¹The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Total Number of Active Members Per Year



Schedule of Retirants and Beneficiaries Actuarial Valuation as of June 30

(dollars in thousands - except average annual benefit)

	Added to Rolls			Removed from Rolls		Rolls – End of Year		Percent			Percent		
	Number	Annual Benefits		Number	Annual Benefits		Number	Total Annual Benefits¹		Increase / (Decrease) In Total Annual Benefits	Average Annual Benefit		Increase / (Decrease) in Average Annual Benefit
2016 ²	8	\$	23	2	\$	14	74	\$	364	(0.5) %	\$	4,919	(8.5) %
2015 ²	1		2	1		1	68		366	0.5		5,377	0.3
2014 ²	-		-	-		-	68		364	-		5,362	-
2013	9		41	4		26	68		364	4.3		5,362	(3.1)
2012	2		13	4		20	63		349	(2.0)		5,536	1.1
2011	4		22	-		-	65		356	2.6		5,477	(3.7)
2010	5		9	3		27	61		347	(6.5)		5,685	(9.5)
2009	17		88	2		2	59		371	35.3		6,281	0.9
2008	1		-	2		10	44		274	(3.4)		6,223	(1.2)
2007	6		31	-		-	45		283	9.1		6,298	(5.4)

1End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases. ²The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.

Total Number of Retirants and Beneficiaries Per Year and Average Annual Benefit

